





ORIGINS Annual Performance Report 1 July 2024 - 30 June 2025

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Acknowledgements

ORIGINS acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of the land and waters of Australia. We also acknowledge the Nyoongar Wadjuk, Yawuru, Kariyarra and Kaurna Elders, their people and their land upon which the Institute is located and seek their wisdom in our work to improve the health and development of all children.

ORIGINS acknowledges the gift of the participant families who willingly give us their time and spirit in the goal of advancing scientific discovery to help all children.

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ORIGINS: a globally unique interventional platform enabling research discovery

ORIGINS' goal is to discover how a child's early environment influences the dramatically rising risk of chronic health conditions such as allergies, obesity, gut health, respiratory, mental health issues and neurodevelopmental challenges. ORIGINS is a collaboration between **The Kids Research Institute Australia (The Kids)** and **Joondalup Health Campus (JHC).**

ORIGINS information is being used by researchers around the world to identify and implement ways to reduce risks for children. The samples and information being collected, from complete family units, are creating a rich resource in the ORIGINS Biobank which (at the time of reporting) contains more than **420,000 biological samples linked over 30 million data points.**

Comprehensive analyses have also begun on some participants' biological samples, funded by the Stan Perron Charitable Foundation. This has produced rich longitudinal datasets of microbiome, inflammatory and metabolomic information that is now available to researchers. Additionally, we have embedded multiple studies within the ORIGINS platform (approximately 60+ current studies), further enriching data collections, as well as opportunities for families to be involved in novel research interventions.

The Aim of ORIGINS

ORIGINS aims is to improve the health of the next generation through a better understanding of how to optimise the early environment. Over a decade we recruited 10,000 children, along with their families, when their mother was early in pregnancy at Joondalup Health Campus and collect biological samples, routine data and web-based questionnaires on physical and mental health, diet, physical activity patterns and a range of environmental factors, creating an extensive Biobank and Databank in pregnancy, early years, primary school, high school and beyond.

ORIGINS includes:

- 'Active' families undertaking multiple data and sample collections at specific time points.
- 'Non-active' families access to all routinely collected hospital data, opportunistic samples and linkage to government and non-government databases.

The data from the ORIGINS research platform - **Biobank and Databank** - will assess how early life exposures influence a child's growth, development and health. ORIGINS' significant Biobank (DNA, breast milk, urine, stool, plasma and mononuclear cells) will build substantial additional future capacity to address critical

questions (including genetic, epigenetic, metagenomic, proteomic and metabolomic studies) as technologies and new avenues of investigation evolve.

Annual Performance Report 2024-2025

This Annual Performance Report outlines the progress made and deliverables achieved during the reporting period 1st July 2024 to 30th June 2025.

ORIGINS Current Status

Since commencement in January 2017 (as at end of June 2025):

- ORIGINS has welcomed 10,270 families
- These families include:
 - o **10,270** women (4,000 active and 6,270 non-active)
 - o **10,007** babies (3,725 active and 6,282 non-active)
 - o **2,625** partners (1,151 active and 1,474 non-active)
- That equates to 22,902 individuals
- We have completed many valuable assessments with our families, including
 - o **2,837** assessments on one-year infants (88% of all eligible 1-year-olds)
 - o 1,876 appointments with our three-year children (69% of all eligible 3-year-olds)
 - o 1,001 'Kids Checks' appointments with our five-year-olds (69% of all eligible 5-year-olds)
- The ORIGINS recruitment team has enrolled 1,616 mothers for two or more pregnancies.
- Our 10,007 ORIGINS children are made up of 9,692 singletons, 156 sets of twins, 1 set of triplets.
- The ORIGINS Biobank is one of the largest Australian biological cohort collections.
- We have collected more than 420,000 biological samples.
- ORIGINS has generated unique and comprehensive datasets of inflammatory and metagenomic information from a pilot set of 2,500 plasma samples, and 900 stool samples. In 2025-2026, 700 of these plasma samples will also undergo metabolomic analyses.
- We have collected more than 30 million data points in the ORIGINS Databank.
- **60** sub-projects have been integrated within ORIGINS, looking at multiple aspects of child and family health and development.
- ORIGINS has supported **21** PhD students, **11** postgraduate, and 10 Doctor of Medicine and **19** undergraduate students.
- Connected with over 700 national and international researchers who are actively engaged in ORIGINS.

Return on Investments

The ORIGINS infrastructure has been a catalyst for investment in nested sub-projects. The set-up of ORIGINS enables researchers to implement their research projects, leveraging a fully developed platform providing coast savings and economies of scale. ORIGINS recoups cost back to sustain and increase the capacity of ORIGINS' resources. A degree of cost recovery is required from those requesting and granted use and/or access to the cohort.

To date, ORIGINS infrastructure has attracted independent grant funding in excess of **\$42 million** which represents an outstanding return on original investment.

Highlights of the Year

Funding and partnerships

- The Stan Perron Charitable Foundation contributed \$1,944,519 in 2024-25 to support the ongoing implementation and development of ORIGINS.
- **Funding support** from the Western Australian Future Health Research & Innovation Fund (through the Department of Health) acknowledging the role ORIGINS plays in developing research capacity building in WA.
- ORIGINS has collaborated with GenV to advocate for federal funding in **Generation Australia** the combination of two of Australia's largest and richest birth cohort studies.
- In May 2025, we strengthened strategic collaboration across Western Australia's Research Enabling
 Platforms (REPs) through the development and testing of an Impact Methodological Framework. In
 partnership with The Raine Study, ORIGINS, and the Busselton Health Study, a co-designed workshop
 brought together diverse expertise to refine a practical, shared approach to impact planning and
 evaluation. This collaboration not only built capacity within each REP but also laid the groundwork for
 aligned investment cases and future joint initiatives.

Operational

- The **10,000**th **baby** was born in early October 2024, establishing a comprehensive cohort to support longterm, population-based research.
- Successfully completed all 1-year Kids Checks appointments with 2,837 clinic appointments attended.
- 335 non-active new families were recruited into ORIGINS
- **1,165 new children** joined ORIGINS in 2024-25 (the difference in number of pregnancies and children is due to mother being pregnant at the time of reporting, loss of pregnancy or withdrawal before birth).
- **12 new sub-projects** have been approved by the ORIGINS Scientific Committee and Project Management Group to be nested within ORIGINS.
- 12 research papers were published on ORIGINS related research.
- **13 PhD students** are currently working on projects in ORIGINS. The number of PhD students has doubled since 2016. Extensive mapping of participant recruitment, retention and attrition has been undertaken, with a new reporting system set up within the power BI live dashboard.
- A community engagement workshop held in May 2025 with participants from our cohort reinforced this
 commitment by providing a space for dialogue, feedback, and shared learning between the ORIGINS team
 and our research participants.
- In 2025, ORIGINS undertook **strategic and business planning** with the primary focus on research prioritisation and a conceptual strategic framework which will be used to guide ORIGINS and sub-projects.
- With support from the Stan Perron Charitable Foundation, a pilot analysis of inflammatory, microbiome, and metabolic data has commenced, converting limited biosamples into high quality digital datasets now being used to study early-life immune and microbiome development.

Key challenges and responses

• Compliance and retention of participants continues to be a challenge for ORIGINS, as is for many largescale research studies. To address this, we have employed a dedicated participant engagement team member who is tracking and assisting families to complete their data and sample collections. This has had a significant impact on the rates of completion over the past two months.

- Managing the scale and complexity of the ORIGINS Biobank (over 420,000 samples) remains a major
 logistical challenge, requiring ongoing coordination to balance sample preservation with research
 demands. With support from the Stan Perron Charitable Foundation, a pilot analysis of inflammatory,
 microbiome, and metabolic data has commenced, converting limited biosamples into high quality digital
 datasets now being used to study early-life immune and microbiome development.
- Ensuring sustainable funding of the ORIGINS platform is an ongoing challenge. ORIGINS continues to advocate to key stakeholders about research discoveries and translation impact to ensure there is continued support for future wave collections. Changes in government and non-government organisational portfolios and policies can make this work challenging.

Project opportunities 2025-2026

- Implementation of the revised ORIGINS Strategic Framework and operational initiative which will guide research prioritisation over the next 10 years.
- Continuation of **operational funding support** from the Western Australian Future Health Research & Innovation Fund (through the Department of Health) will assist with the operational and research costs associated with running a large-scale project.
- **Primary School Years (7-9 years) Kids Check appointments** will commence in 2026, enabling continued follow-up of participants with updated questionnaire content focusing on language, literacy, mental health, peer relationships, social media, and lifestyle behaviours.
- **Cohort expansion** is proposed to include a cross-sectional cohort of Grade 3 children, with plans to harmonise data with Gen V (Victoria) and Born in Bradford's Better Start (UK). This supports future integration and collaborative research into effective, evidence-based interventions for child health and wellbeing.
- **Data linkage** approval is currently being sought to enable integration with government, health, and education systems, supporting genomic and advanced analyses. This will maximise our existing data value, enhancing follow-up capacity, and deepening ORIGINS' impact on child and population health.
- **Consolidation of the biological collection** across ORIGINS' freezers to minimise the footprint and expense of maintenance and upkeep.
- Targeted interventional sub-projects that address community and stakeholder priorities within key research domains.
- Completion of metabolomic analyses by August 2025 will finalise the multi-omic dataset (inflammatory microbiome, and metabolomics). The new datasets are already generating interest, with **3 sub-projects** approved by the ORIGINS Scientific Committee to utilise these data.
- A **Senior Biostatistician** has been appointed to lead detailed descriptive analyses of the multi-omic datasets, enhancing internal capability in high-dimensional data analysis.
- These efforts are intended to **attract additional funding** to enable large scale analyses across the full Biobank and potentially expand to other omics areas, such as **genomics**.

Participant Recruitment and Retention

ORIGINS' active participants are pregnant women (and the non-birthing partner, where possible) who are recruited

with informed consent early in their pregnancy to collect detailed environmental and psychosocial data through questionnaires, medical records, diagnostic tools, and collection of biological samples.

When the child is born, they are also consented as an individual. ORIGINS families are contacted at multiple touchpoints throughout their ORIGINS journey by the ORIGINS team.

Non-active participants are recruited when the child is born, and their pregnancy data is collected retrospectively. Non-active pregnant women may also be recruited during pregnancy but may choose to provide the project only with



routine data, rather than become a full active participant who is contacted at regular intervals. (See **page 3** for a more detailed explanation of active vs non-active ORIGINS participants).

Participant consent recruitment 2024-2025

| Participant Recruitment (No. signed consents) | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Total in reporting period | Project Cumulative Total |
|---|-------|---------|---------|--------|-----|-----|-----|-----|-----|-----|-----|-----|---------------------------|--------------------------------|
| Active pregnancies consented | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,000 |
| Non-active pregnancies consented | 109 | 103 | 102 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 316 | 6,271 |
| | Total | pregnai | ncies c | onsent | ed: | | | | | | | | 316 | 10,271 |
| Active partners consented | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,151 |
| Non-active partners consented | 4 | 9 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 1,474 |
| | Total | partner | s conse | ented: | | | | | | | | | 66 | 2,590 |
| Active babies consented | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,725 |
| Non-active babies consented | 110 | 114 | 111 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 359 | 6,282 |
| | Total | babies | consen | ted | | | | | | | | | 359 | 10,007 |

ORIGINS Kids Check appointments: Active participants June 2024-July 2025

Due to participant and appointment availability, participant families often do not attend clinic the corresponding month of their birthday. Therefore, attendance and compliance are measured 6 months out from the appointment due date.

| ORIGINS One-Year Appointments | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Total 2024- 2025 FY |
|---|------|-------------|------|------|-----|-----|-----|-----|-------------|------|-----|-----|---------------------------|
| One-year appointment: expected based on birth date | 28 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| One-year appointment: actuals at one-year | 28 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| Percentage Completion | 100% | 100% | 100% | NA | NA | NA | NA | NA | NA | NA | NA | NA | 100% |
| ORIGINS Three-Year Appointments | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Total 2024- 2025 FY |
| Three-year appointment: expected based on birth date | 49 | 70 | 52 | 48 | 56 | 40 | 33 | 65 | 52 | 41 | 29 | 44 | 579 |
| Three-year follow up: actuals at three-year | 29 | 40 | 34 | 48 | 48 | 27 | 22 | 64 | 60 | 34 | 39 | 30 | 475 |
| Percentage Completion | 59% | 57 % | 65% | 100% | 86% | 68% | 66% | 98% | 120% | 83% | 97% | 68% | 82% |
| ORIGINS Five-Year Appointments | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Total 2024- 2025 FY |
| Five-year appointment: expected based on birth date | 30 | 47 | 60 | 42 | 54 | 44 | 60 | 48 | 43 | 41 | 42 | 37 | 548 |
| Five-year follow up: actuals at five-year | 49 | 27 | 38 | 43 | 22 | 30 | 52 | 20 | 16 | 41 | 34 | 34 | 406 |
| Percentage Completion | 160% | 57 % | 63% | 102% | 41% | 68% | 87% | 42% | 37 % | 100% | 81% | 92% | 74% |

ORIGINS Biobank

The ORIGINS Biobank comprises one of the largest Australian cohort collections and we are pleased to report this continues to translate to successful funding applications, analysis and publications. The Biobank houses biological samples from participant families at 10 timepoints across five years, now planning the Primary School wave sampling protocol in 2026.

A **new sample-type** has been introduced to the protocol in 2025: child teeth. The "ORIGINS Tooth Fairy" has been established as part of a communications strategy to engage in a fun and exciting way with families for this new collection.



In response to community and participant feedback, the ORIGINS Biobank is hoping to invite mothers and fathers for blood sample analysis at the Primary School visit to further enrich the collections in a whole-family approach. The Biobank currently contains over **420,000 samples** and this will continue to grow to an estimated 600,000 individual samples by 2027.

A key transition in Biobank operations during 2024-2025 has been the design and initiation of centralised biological sample analyses, aim to generate infinitely accessible digital datasets from the finite physical samples. This addresses a key challenge regarding sample utilisation and longevity, and now presents significant opportunity for expansion, made possible through the generous support of the Stan Perron Charitable Foundation.

Efforts have now begun to consolidate the biological collection across ORIGINS' 13 freezers to minimise the footprint and expense of maintenance and upkeep. Old freezers past warranty are being replaced to ensure security of the specimens however the goal is to reduce the overall number of freezers in operation. Strategy to achieve this includes the centralised sample analyses and the reformatting (homogenisation) of stool - the most space-inefficient sample in their current format. Plans are underway for a de-fragmentation of the collection in 2026 to consolidate containers from which samples have been utilised, reducing empty space.

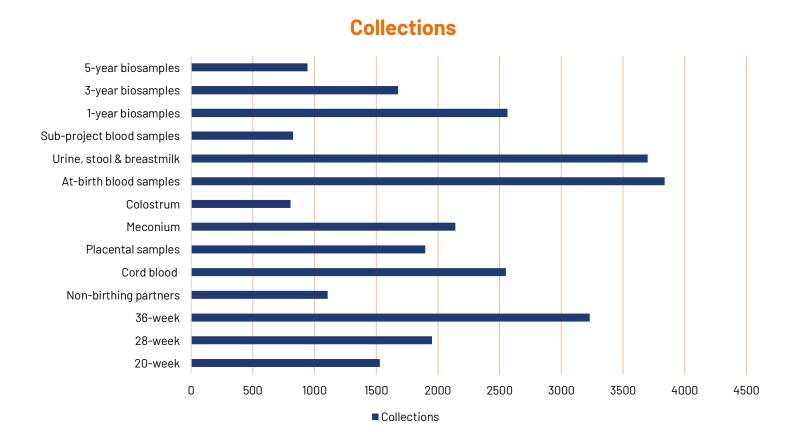
Key activities in reporting period

Sample collections, including a comprehensive set of blood, buccal, saliva, urine, and stool are steadily growing, with new child tooth collections initiated.

Collections from our Kids Check timepoints include cheek swabs, saliva, stool and urine, and bloods from some. **5,569** specimens were released between July 2024 and June 2025 to **3 sub-projects and for the centralised ORIGINS sample analyses**. Over the project's duration, a total of **14,472** specimens have been released to **20 sub-projects**.

The **first publication detailing the ORIGINS Biobank** was published in the International Journal of Environmental Public Health in June 2023.

All collections from the antenatal period to age 1 are now completed, and accumulative figures for collections are as follows:



ORIGINS Databank

ORIGINS is collecting a wealth of administrative, biological, physiological, clinical and assessment data from the ORIGINS families. The data is collected over fifteen timepoints beginning from 20 weeks' gestation through to seven years of age to enable tracking of the child's development. ORIGINS is in a unique position to link and integrate data from multiple sources within an Amazon Web Services (AWS) platform to enable development and maintenance of a comprehensive longitudinal databank. Data provided to researchers is de-identified and encrypted.



Data derived from samples ('omics data such as metabolomics, transcriptomics, proteomics) and microbiome analyses will be linked using the Amazon Web Services (AWS) platform developed. All data are linked through unique identifiers to track individual participants as well as family units. In 2024–2025 a total of **4,3734 online questionnaires** were completed by ORIGINS participants.

Key activities in reporting period

• Improvements have been made to the ORIGINS data platform, an **integrated AWS research cloud**, to assist with the integration of sub-project returned data and **omics data** with participant data.

- A live Power BI dashboard has been set up to track real time participant recruitment, retention and attrition statistics, including questionnaire and sample compliance longitudinally.
- Extensive cleaning, coding, and scoring of raw data has begun, to ensure that data is 'researcher ready'.
- A total **12 data extracts** were cleaned and provided to ORIGINS sub-projects for their research.
- The ORIGINS data platform received data back from six ORIGINS sub-projects.
- The **first publication detailing the ORIGINS Databank** was published in the *International Journal of Population Data Science* in September 2024.

Research Translation and Collaboration

Collaboration and engagement are fundamental elements of ORIGINS at every level. We have **strong links with other birth cohorts** locally, nationally and internationally and are working towards developing a global cohort network to harmonise and enhance research capacity.

ORIGINS information is being used by **researchers all around the world** to identify and implement ways to reduce risks for children and to answer many questions about the development of chronic health conditions. Find out more about how we collaborate with our partners on the **ORIGINS website**.

For it to be valuable, our research needs to contribute to the global understanding of disease, influence policy and practice, build capacity and collaboration, and must have a direct effect on the lives of children, and we are already seeing this happen through ORIGINS. We are **ensuring our research is translated into real-life outcomes** that make a tangible difference to communities, now and in the future.

As well as enabling strategic long-term research capacity, **ORIGINS** is a 'responsive' system with 'real-time' feedback to parents and their children, and translation to clinical and diagnostic services. This opportunity to intervene early could potentially change the long-term health trajectory of these children.

When needed, ORIGINS provides **referral to appropriate services** for participants – mother, partners and infants. Examples of early identification and referral that we have assisted our families include developmental delay, allergic disease, unhealthy growth trajectory, sleep problems, as well as psychosocial and mental health issues.

Key activities in reporting period

- We have continued to build and support the **research capacity** of the ORIGINS team, and have continued to disseminate ORIGINS research activities, through publications and presentations.
- In the reporting period, **18 research papers** were published on ORIGINS related research.
- Of the 60 current or completed nested sub-projects, 2,324 have direct contact with ORIGINS participants.
- Sub-projects that **completed all participant recruitment** during this reporting period include ACE Infant Feeding.
- Realtime, responsive feedback has enabled early identification of the following:
 - Positive skin prick test results:
 - 1 Year: 4 out of 40 (10%)
 - 3 Years: 68 out of 417(16%)
 - 5 Years: 108 out of 369 (29%)

Overall, **180** positive skin prick tests at the 1-, 3- or 5-year clinic appointments (i.e. approximately **22**% of the cohort seen).

 Referrals by ORIGINS Paediatric team: 84 (i.e. approximately 9% of the cohort) paediatric referrals on identification of infant abnormalities such as developmental delays, including hearing, vision and speech. • The IRON Child sub-project identified high rates of iron deficiency in children. One-third of 1-year-olds and two-thirds of 3-year-olds, raising important implications for early intervention and long-term neurodevelopmental outcomes.

Nested Studies: ORIGINS sub-projects

As well as ORIGINS long-term core research, there are multiple **clinical trials**, **early interventions and shorter-term research studies** that sit within ORIGINS. Known as sub-projects, these studies look at multiple aspects of child and family health and development. See recruitment numbers in tables below.

| Study | Recruited | Recruitment Status |
|--------------------------------|-----------|--------------------|
| 5 Year Developmental Follow-Up | 284 | Ongoing |
| ACE | 98 | Completed |
| ADAPTS | 60 | Completed |
| AERIAL/NOSE | 466 | Completed |
| BENEFIT | 108 | Completed |
| CARE-Dads | 503 | Completed |
| CASHEW | 196 | Completed |
| CEED | 778 | Completed |
| COCOON | 419 | Completed |
| CUB | 103 | Completed |
| Dental Screening | 42 | Completed |
| Early Moves | 2301 | Completed |
| ENGAGE | 13 | Completed |
| Flourishing Child | 511 | Completed |
| Flourishing in Fatherhood | 312 | Completed |
| Happy Parenting Program | 18 | Completed |
| IRON CHILD | 220 | Completed |
| Kindy Readiness | 223 | Ongoing |
| LONG COVID | 73 | Completed |
| Mast Cell | 28 | Completed |
| Mums Minds Matter | 76 | Completed |
| Nature Play and Grow | 25 | Completed |
| NEVISENSE | 622 | Completed |
| PLAN | 57 | Completed |
| PLANET | 52 | Completed |
| Positive Family Foundations | 0 | Withdrawn |
| PrEggNut | 188 | Completed |
| Refraction and Axial Length | 78 | Ongoing |
| SCREEN ORIGINS | 57 | Completed |
| SunPreg | 48 | Completed |
| SYMBA | 652 | Completed |

| TALK | 501 | Completed |
|------------------------|-----|-----------|
| Time out for Wellbeing | 164 | Completed |
| TUMS | 197 | Completed |

Stakeholder and Community Engagement

At the heart of ORIGINS is a strong and engaged community of stakeholders who help shape our research priorities through challenges identified via extensive, ongoing consultation. This close collaboration - between participants, community members, policymakers, funders, researchers, and clinicians - has fostered a united voice that champions research-enabling platforms like ORIGINS. Their continued support has been instrumental in ensuring the program's sustainability and growth, both nationally and internationally, within the early childhood and family health research landscape.

See key activities undertaken during the reporting period below.

Media Appearances

The West Australian

- o <u>ORIGINS longitudinal project: Telethon funded health study in WA welcomes 10,000th baby participant</u>
- o ORIGINS researchers start work on new early childhood tool to identify 'flourishing' kids
- o Why are toddlers anxious?

• 7NEWS

- o A third of one-year-olds and up to two thirds of three-year-olds have low iron
- o <u>A groundbreaking Perth study that follows a child's health and development from birth will soon be</u> used to create a resource for new parents

9News

- o Custom mental health app empowers new mums with lifelong wellbeing skills
- New evidence confirms that timely introduce of known allergens can significantly reduce an infant's risk of developing food allergies

ABC

- o <u>ABC Mornings Dr Jamie Tan discusses concerning findings on low iron levels in Australian</u> children
- ABC Mornings Perth and ABC Mornings Sydney Dr Norman Swan on Four Corners' Generation Cancer episode and the importance of longitudinal cohort studies like ORIGINS
- o Four Corners Generation Cancer

• The Herald Sun

o These Aussies are shaping our future. Here's what it means to your family

• Research Australia

o Low iron link to kids' mental health and behaviour issues

Medical Forum

o Low iron among WA children: what doctor's need to know

• The Health Report

o Mapping the environmental exposures that impact human health

Social Media

Participant Facebook Group

- o 52 posts
- o 364 total members
- o 15 new members
- o 108 comments on posts
- o 363 reactions to posts
- LinkedIn established November 2024
 - o 440 followers
 - o 51 posts
 - o 1,610 clicks
 - o 29,805 impressions
 - o 925 reactions
 - o 54 comments
 - o 20 reposts
 - o 78.3% of followers reside within Australia
 - Top 3 follower industries Research Services, Higher Education, Hospitals and Health Care



Stakeholder Engagement

- The ORIGINS Participant Reference Group reviewed and provided their input on six new sub-projects.
- In April 2025, active ORIGINS participants took part in a Community Conversation to provide feedback and input into ORIGINS' 10-year strategic planning.
- ORIGINS hosted the Wanneroo & Surrounds Early Year Network meeting at The Kids Research Institute Australia where over 25 members heard updates from ORIGINS sub-projects and participated in discussion regarding future research projects and translation opportunities.
- In May 2025, various funders, clinicians, researcher and policy makers participated in a Stakeholder Workshop to help determine key stakeholder research priorities separate from consumers to influence ORIGINS' 10-year strategic plan

New Partnerships

Several new partnerships have been established over the reporting period, including the Lions Eye Institute, Ishar Multicultural Women's Health Centre, The Fathering Project, Minderoo Foundation, Ngala, Playgroup WA, Murdoch University and the WA Country Health Alliance.

ORIGINS is a community project with global implications; therefore, community collaboration is essential. We have created extensive relationships with a range of stakeholders and community groups and continue to work in **collaboration for mutual long-term benefit**.

We work closely within existing and newly established partnerships that allow us to spread our reach further, to achieve more and to learn from each other.

Staff, Volunteers and Students

Crucial to ORIGINS are the staff, volunteers, and students. They are the drivers of ORIGINS, led by the Project Directors and senior project management team. ORIGINS team members demonstrate passion and commitment generated from a strong belief in ORIGINS' vision and aims.

Staff

There are approximately **38** staff working within ORIGINS, many of whom work in a part-time capacity. This includes clinical, administrative, management, technical and research staff. Staff are employed through either The Kids Research Institute or Joondalup Health Campus via Ramsay Health Care. Meet the Management team on the **ORIGINS** <u>website</u>. We actively work to **build ORIGINS** team members capacity, offering mentoring programs and professional development opportunities. Staff undertook a range of internal and external training opportunities during the year.

Students and Volunteers

- 35 students are progressing manuscripts for publication.
- 7 volunteers assisted data cleaning and research and translation.
- ORIGINS has supported 7 placement and/or internship students from Curtin University, UWA, McCusker Internship, and Princeton University (New York).



APPENDICES

Appendix One: ORIGINS Sub-Projects

Current & Completed ORIGINS Sub-Projects

| Sub-Project | Туре | Impact/Focus | Status 30 June 2025 (N) | Grant Value |
|--|-----------------------------------|--|----------------------------------|---|
| 5-Year Developmental Follow-up | Observational | Speech and language outcomes of 5-year- olds | Recruitment ongoing (284/600) | ~ \$35,000 And in-kind (ORIGINS; ECU) |
| A family's journey at JHC: Analyses of routinely collected data | Observational | JHC mother and father profiling | Ongoing | ORIGINS internal sub- project |
| ADAPTS: Antibiotic Dysbiosis and Probiotics Trial in infants | Randomised Controlled Trial | Gut health in infants | Recruitment completed (60) | ~\$110,000 |
| AERIAL: Airway Epithelium Respiratory Illnesses and Allergy | Observational | Asthma | Recruitment completed (466) | ~\$3,660,000 |
| BEACHES: Built Environments and Child Health in Wales and Australia | Observational | Built environment, physical activity and childhood obesity | Reviewing data | ~\$800,000 |
| BENEFIT: Breastfeeding and Eating Nuts and Eggs for Infant Tolerance | Randomised Controlled Trial | Reducing infant egg and peanut allergies | Recruitment Completed (108) | ~\$180,000 |
| The BioMood study: A PILOT study assessing the association between Mediterranean diet, microbiome, metabolome, inflammation and mental health during pregnancy | Observational | Diet, microbiome, inflammation and mental health | Commencing sample analysis | ~\$40,000 |
| C3H: Analysis of ORIGINS cohort data to detect fine-scale impacts of climate change on child health | Observational | Climate change and child health | Commencing data extraction | \$20,500 |
| CARE-Dads: Cardiovascular Risk Evaluation in Expectant Fathers | Observational | Cardiovascular and mental health of fathers | Project completed (503) | ~\$320,000 And in-kind (ORIGINS) |
| The Cashew Study: Introducing cashew nuts during infancy | Randomised Controlled Trial | Reducing infant cashew allergies | Recruitment completed (196) | ~\$50,000 And in-kind (ORIGINS) |
| Colostrum Exclusivity for Early Development (CEED) | Observational | Allergies, nutrition, growth and development | Data analysis | ~\$161,000 |
| CLEAR: Climate-related exposures and hair cortisol concentrations among pregnant women in ORIGINS | Observational | Environment and Lifestyle | Commencing data extraction | ~\$5,000 |

| Sub-Project | Туре | Impact/Focus | Status 30 June 2025 (N) | Grant Value |
|--|-------------------------------------|---|------------------------------|-------------------------------------|
| COCOON: The COVID Community compassion study: Assessing virus transmission, immunity development and wellbeing of families during COVID-19 | Observational | COVID-19 | Recruitment completed (419) | ~\$150,000 And in-kind (ORIGINS) |
| ORIGINS Community Wellbeing during the COVID-19 Pandemic | Observational | Mental health during COVID-19 | Ongoing | ORIGINS internal sub- project |
| CUB/Baby AICES - A randomised-controlled trial of a parent-mediated intervention for optimising social and communication development of newborns at increased familial risk of autism spectrum disorders | Randomised Controlled Trial | Parenting education and child development | Recruitment completed (103) | ~\$41,000 |
| Deciphering Bifidobacterium | Observational | Allergy, immunity, inflammation, nutrition, metabolism, environment, lifestyle, infections, vaccines and growth and development | Commencing sample extraction | ~\$3,500,000 |
| Dental screening: Tele- screening for early childhood caries detection during COVID- 19 pandemic | Observational | Oral health | Recruitment completed (42) | ~\$50,000 |
| Diabetes during pregnancy and subsequent child development: A 3-year follow-up study | Observational | Diabetes | Commencing data extraction | ~\$70,000 |
| DreamStart: Exploring the Role of Infant Sleep in Early Childhood Development | Observational | Behavioural development | Analysis | ORIGINS PhD Student Award |
| Early Moves | Observational | Neurodevelopmental assessment of general movements in babies | Recruitment completed (2301) | ~\$4,200,000 |
| The Engage Study: Discovering and delighting in your baby (pilot) | Single arm intervention trial | Parenting education | Project completed (13) | \$615,000 |
| Fertility: Examining subfertility in a prospective birth cohort | Observational | Fertility in a population pregnancy cohort | Ongoing | ORIGINS internal sub- project |
| The Flourishing Child (Phase 1) | Observational | Mental health and wellbeing, growth and | Recruitment completed (511) | ORIGINS internal sub- project |

| Sub-Project | Туре | Impact/Focus | Status 30 June 2025 (N) | Grant Value |
|---|----------------|--|--|----------------------------------|
| | | development, and environment & lifestyle | | |
| The Flourishing Child (Phase 2) | Interventional | Mental health and wellbeing, growth and development, and environment & lifestyle | Recruitment completed (511) | ~\$750,000 |
| | | | | |
| Flourishing in Fatherhood | Observational | Cardiovascular and mental health of fathers | Recruitment ongoing (216/300) | ~\$270,000 |
| Gateway to Allergy Prevention | Observational | Food allergies, prebiotics | Commencing sample analysis and data extraction | ~\$250,000 |
| Generative Al | Observational | Artificial intelligence in disease recognition | Completed | ~\$50,000 |
| IRON Child | Interventional | Nutrition and health outcomes | Completed | ORIGINS internal sub- project |
| Kindy Readiness: Preschool readiness in the ORIGINS cohort | Observational | Development, wellbeing and readiness for kindergarten | Recruitment ongoing (223/5000) | ORIGINS internal sub- project |
| Mast Cell: Contribution of a novel mast cell subset to development of atopic disease | Observational | Allergies | Recruitment completed (28) | ~\$100,000 |
| Maternal and Child Mental Health: Examining the Pathways of Perinatal Maternal Mental Health that Influence Child Mental Health Outcomes | Observational | Maternal and child mental health | Commencing data analysis | ORIGINS internal sub- project |
| Maternal Diet Quality | Observational | Nutrition and metabolism | Commencing data analysis | ~\$12,500 |
| Mediterranean Diet: The impact of a Mediterranean diet and physical activity in pregnancy on gestational weight gain and neonatal body composition at birth and weight at 1 year of age | Observational | Diet and body composition | Completed | ~\$10,000 |
| Mums Minds Matter: A three-arm pilot study of mindfulness vs self- compassion vs relaxation training for reducing stress and promoting wellbeing among pregnant women | Interventional | Maternal mental health | Recruitment completed (76) | ~\$23,000 |
| Nature Play & Grow: A pilot study of a family- based intervention to | Interventional | Nature relatedness | Recruitment completed (25) | ~\$75,000 |

| Sub-Project | Туре | Impact/Focus | Status 30 June 2025 (N) | Grant Value |
|---|-----------------------------------|--|--|--|
| improve child health and | | | | |
| well-being NDD: ORIGINS of | | | | |
| Neurodevelopmental Risk and Resilience Project Amendments | Observational | Neurodevelopment | Commencing data extraction | ~\$230,000 |
| Newborn Nasal Sampling Evaluation (NOSE) Study (Pilot study of AERIAL) | Observational | Asthma risk | Recruitment completed (141) | Under AERIAL funding |
| Parenting in Digital Age | Observational | Child screen use | WACHS Advanced Trainee project | ~\$8,000 |
| PEAPOD: Maternal and neonatal factors affecting neonatal body fat percentage | Observational | Overweight & obesity | Commencing data analysis | ORIGINS internal sub- project |
| Paediatric Burns: Understanding the long-term immune and metabolic impacts of paediatric burn trauma | Observational | Burns, infection & immunity | Data extraction & analysis | ~\$120,000 |
| The PLAN Project (pilot study): Pregnancy Lifestyle Activity and Nutrition | Randomised Controlled Trial | Overweight & obesity (mother and child) | Completed (57) | ~\$275,000 |
| PLANET Project: Plastics in Pregnancy | Observational | Plastic contamination in samples | Recruitment completed (52) | ~\$380,000 |
| Playgroup WA: Benefits beyond play: Investigating the Impact of Playgroups on Mental Health and Socio- Emotional outcomes in Parents and Children in The ORIGINS Project | Observational | Health and developmental benefits of attending playgroups | Commencing data analysis | ~\$26,000 |
| The PrEggNut Study: A Maternal diet rich in eggs and peanuts to reduce food allergies | Randomised Controlled Trial | Reducing infant egg and peanut allergies | Recruitment completed (188) | ~\$124,000 |
| Preschool ASD and Nutrition | Observational | Nutrition in Preschool Children with Autistic Behaviours | Commencing data analysis | ~\$14,500 |
| RAINE Comparison Study | Observational | Environmental and lifestyle changes in the antenatal population | Pending on MNS data for ORIGINS representativeness paper | In-kind support and collaboration between 2 WA cohorts |
| Refraction and Axial Length Trajectory | Observational and Interventional | Document eye growth patterns in children | Recruitment ongoing (78/500) | ~\$150,000 |
| A Respectful Approach to Early Parenting | Interventional | Developing the parent-child relationship | Recruitment ongoing (18/144) | ~\$120,000 |
| RHINO (Respiratory Outcomes) | Observational | Respiratory and Allergic Health Outcomes | Commencing data extraction | In-kind support from ORIGINS |
| Sleep and Iron Study | Observational | Iron deficiency and quality of sleep | WACHS Advanced Trainee project | ~\$8,000 |

| Sub-Project | Туре | Impact/Focus | Status 30 June 2025 (N) | Grant Value |
|---|-----------------------------------|--|---|--|
| STARS | Intervention | Neurodevelopment | Recruitment to start | ~\$2,000,000 |
| Screen ORIGINS: Longitudinal study of the multidimension influences and impacts of contemporary screen technology use over the first 5 years of life (quantitative & qualitative) | Observational | Family screen technology use | Quantitative study: Completed Qualitative study: Recruitment completed (57) | ~\$13,000 |
| STORK: A pilot retrospective observational study to assess biomarkers of stress and serotonin pathways in pregnant women in ORIGINS | Observational | Maternal mental health | Commencing sample extraction | In-kind support from Australian National Phenome Centre and ORIGINS |
| The SunPreg Study: Measuring sun exposure in pregnancy and its association with the development of early childhood allergies | Observational | Benefits of sunlight exposure in pregnancy on maternal skin | Recruitment completed (48) | Student project |
| The SYMBA Study: Improving gut health (symbiosis) for allergy prevention | Randomised Controlled Trial | Reducing infant allergies | Recruitment completed (652) | ~\$2,300,000 |
| SYMBA-3 | Observational | Reducing infant allergies | Awaiting data extract | ~\$125,000 |
| Testosterone and Language in Kids (TALK) Study | Observational | Cerebral lateralisation and early language development | Recruitment completed (501) | ~\$700,000 |
| Time Out for Wellbeing: an experimental study linked to the Mums Minds Matter Project | Observational | Maternal mental health | Recruitment completed (164) | ~\$1,500 |
| TUMS: Water quality and the microbiome study | Randomised Controlled Trial | Microbiome in infants | Recruitment completed (197) | ~\$520,000 |
| Ultrasound Image Measurement | Observational | Machine learning | Commencing image analysis | In-kind support from ORIGINS |
| Urinary Ferritin | Observational | Alternative biomarker in estimating iron in children | Commencing pilot study | ORIGINS internal sub- project |
| TOTAL FUNDING | | | | ~\$22,803,000 |

Additional indirect funding is incorporated within ORIGNS from PhD and other students. In total there are 17 students, including 13 PhD students currently working on projects in ORIGINS.

During the reporting period, a total of **12 new sub-projects** were approved by the ORIGINS Scientific Committee and Project Management Group to be nested within ORIGINS. **8** have been successfully initiated, while **6** are pending funding, ethics and/or governance approval. An additional **10** sub-projects are currently under review and awaiting final approval from the Scientific Committee and Project Management Group.

For a detailed description of each of the current ORIGINS sub-projects visit our website.

Appendix Two: ORIGINS Research Dissemination Publications, Papers and Presentations

Publications

- 1. https://doi.org/10.48550/arXiv.2410.20695 Beynon, A.M., Straker, L.M., Rasmussen, C.L., Hendry, D., Stearne, S.M., Zubrick, S.R...Zabatiero, J. (2024). Influence of maternal and infant technology use and other family factors on infant development. BMC Pediatrics, 24(690). https://doi.org/10.1186/s12887-024-05165-4
- 2. Davey, B., Billingham, W., Davis, J., Gibson, L., D'Vaz, N., Prescott, S., Silva, D. & Whalan, S. (2024) "Data resource profile: the ORIGINS project databank: a collaborative data resource for investigating the developmental origins of health and disease", International Journal of Population Data Science, 8(6). https://doi.org/10.23889/ijpds.v8i6.2388
- 3. Davis, J., Talati, Z., Whalan, S., Billingham, W., D'Vaz, N., Gibson, L., Prescott, S., & Silva, D. (2024). Cohort Profile: The ORIGINS Project pregnancy and birth cohort. International Journal of Epidemiology, 53(6). https://doi.org/10.1093/ije/dvae146
- 4. Davis, J.A., Davey, B., Segers, Talati, Z., Silva, D., Prescott, S.L., & Gibson, L. (2025). The Flourishing Child: Understanding how Adults and Children Perceive Flourishing from the Start of Life. International Journal of Applied Positive Psychology 10(18). https://doi.org/10.1007/s41042-024-00213-x
- 5. Davis, J.A., Ohan, J.L., Bear, N., Gibson, L., Silva, D., Prescott, S. & Finlay-Jones, A. (2024). "Stop, pause and take a break": a mixed methods study of the longer-term outcomes of digital emotional wellbeing training for perinatal women. BMC Pregnancy Childbirth 24(811). https://doi.org/10.1186/s12884-024-07002-z
- 6. Divakara, N. (2024). Editorial comment "Effect of maternal prebiotic supplementation on human milk immunological composition: Insights from the SYMBA study" Pediatric Allergy Immunology, 35. https://doi.org/10.1111/pai.70000
- 7. D'Vaz, N., Bear, N., Tan, J., Whalan, S., Kidd, C. & Silva, D.T. (2025). Iron deficiency in young Australian children: A hidden health crisis demanding urgent action. Journal of Paediatrics and Child Health, 61. https://doi.org/10.1111/jpc.70068
- 8. Hancock, D.G., Kicic-Starcevich, E., Sondag, T., Rivers, R., McGee, K, Karpievitch, Y.V... Stick, S.M. (2024). Real time monitoring of respiratory viral infections in cohort studies using a smartphone app. iScience, 27(10) 110912. https://doi.org/10.1101/2024.04.03.24304240
- 9. Kidd, C.D.A., Moumin, N.A., MacRae, A., Green, T.J., Silva, D.T., Prescott, S.L. & D'Vaz, N. (2025). Feasibility of home-based urine collection in children under 5 years in the ORIGINS birth cohort study: mixed method protocol and sample completion results. BMC Nutrition 11(11). https://doi.org/10.1186/s40795-025-00993-8
- Divakara, N., Dempsey, Z., Saraswati, C., Garssen, J., Silva, D. T., Keelan, J.A., Christophersen, C.T., Cooper, M.N., Prescott, S.L., Palmer, D.J., Verhasselt, V. & Macchiaverni, P. (2024). Effect of maternal prebiotic supplementation on human milk immunological composition: Insights from the SYMBA study. Pediatric Allergy and Immunology, 35(e14226) https://doi.org/10.1111/pai.14226
- 11. Morais R., Tran, T., Alexander, C., Amery, N., Morgan, C., Spittle, A., Le, V., Badawi, N., Salt, A., Valentine, J., Elliot, C., Hurrion, E.M., Dawson, P.A. & Venkatesh, S. (2025). Fine-grained fidgety movement classification using active learning. IEEE Journal of Biomedical and Health Informatics, 279(1). https://doi.org.10.1109/JBHI.2024.3473947

- 12. Moumin, N.A., D'Vaz, N., Kidd, C., MacRae, A., Zhou, S.J., Richards, T., Palmer, D., Grzeskowiak, L.E., Sullivan, T.R.. & Green, T.J. (2024). Urinary Ferritin as a noninvasive means of assessing iron status in young children. The Journal of Nutrition, 154(9), https://doi.org/10.1016/j.tjnut.2024.04.040
- 13. Ooi, K.J., Fenton, S., Taylor, R., Hutchesson, M. K., Hinwood, M. & Collins, C. (2025). The relationship between potential Listeria monocytogenes exposure and diet quality and dietary intake during pregnancy: A cross-sectional analysis in Australian women. Journal of Human Nutrition and Dietetics, 38, e70032. https://doi.org/10.1111/jhn.70032
- 14. Palmer, D.J., Cuthbert, A.R., Sullivan, T.R., Pretorius, R.A., Garssen, J., Rueter, K., Jenmalm, M.C., Keelan, J.A., Silva, D., & Prescott, S.L. (2025). Effects of pregnancy and lactation prebiotics supplementation on infant allergic disease: A randomized controlled trial. Journal of Clinical Allergy and Immunology, 155(1), https://doi.org/10.1016/j.jaci.2024.08.009
- 15. Pannu, P. K., Scherini, A.J.J., Silva, D., & Whalan, S. (2024). The ORIGINS Project: A cross-sectional analysis of the nutrition profile of pregnant women in a longitudinal birth cohort. Nutrients, 16(15). https://doi.org/10.3390/nu16152571
- 16. Renouf, B., Sutanto, E.N., Kidd, C., Lim, J., Amin, M., Berry, L., Hoyne, G.F., D'Vaz, N., Kicic-Starcevich, E., Stick, S.M., Iosifidis, T. & the AERIAL study team. (2024). Profiling epithelial viral receptor expression in amniotic membrane and nasal epithelial cells at birth. Placenta, 160. https://doi.org/10.1016/j.placenta.2024.12.029
- 17. Stevens, R., Gorman, S., Arabiat, D., Christophersen, C. T., & Palmer, D. J. (2024). Associations between sun exposure, skin pH, and epidermal permeability in pregnancy: A longitudinal observational study. Photochemistry and Photobiology, 100(5). https://doi.org/10.1111/php.13920
- 18. Whalan, S., Pannu, P.K., Pretorius, R.A., Scherini, A.J.J., Gregory, S., Prescott, S.L. & Silva, D. (2025). ORIGINS: Nutritional profile of children aged one year in a longitudinal birth cohort. Nutrients 17(9). https://doi.org/10.3390/nu17091566

Presentations

- 1. Courtney Kidd (2024). Exploring health and disease trajectories from pregnancy through early childhood with the origins project. A collaborative research platform with centralised biobank-scale 'omic analyses in the pipeline [Poster presentation] Genemappers Conference, New Zealand
- 2. Desiree Silva (2024). ORIGINS cutting edge research opportunities at JHC [Oral presentation] Annual Research Symposium JHC, Perth
- 3. Desiree Silva (2024). ORIGINS: Research enabling platform in WA Clare Firth [Oral presentation] Minister Mark Butlers Office, Adelaide
- 4. Desiree Silva (2024). Early environmental exposures and childhood mental health: Cutting edge research opportunities in WA [Oral presentation] Western Australia ADHD Conference, Perth
- 5. Desiree Silva (2024). Discussion with Federal Ministers in Canberra on an Australian Child Research Platform: Gen A [Oral presentation] Canberra
- 6. Desiree Silva (2024). Cutting edge research in child health [Oral presentation] OMEP Australia
- 7. Desiree Silva (2024). The ORIGINS project update [Oral presentation] The Australian Society for Clinical Immunology and Allergy, Western Australian Immunology Day
- 8. Desiree Silva and Jackie Davis (2024). Development of the Thrive by Five alliance Action Plan [Oral presentation] Thrive by Five WA Alliance
- 9. Desiree Silva (2025). ORIGINS [Oral presentation] Child & Adolescent Community Health Research Seminar, Perth

- 10. Desiree Silva (2025). Research enabling platform for neurodevelopmental disorders [Oral presentation] 16th International Conference of the Pacific Basin Conference, Vietnam
- 11. Desiree Silva (2025). ORIGINS: Plastic Research Opportunities in Pregnancy & Child Health [Oral presentation] 16th International Conference of the Pacific Basin Conference, Vietnam
- 12. Desiree Silva (2025). Invited Speaker: International Women's Day [Oral presentation] Joondalup Health Campus, Perth
- 13. Desiree Silva (2025). Invited speaker: ORIGINS: Research Platform for doctors in training [Oral presentation] Obstetric and Gyn training WA, Perth
- 14. Emily Segers (2024). Flourishing in Fatherhood [Oral presentation] Ramsay Research Month, Perth
- 15. Jackie Davis (2024). The Flourishing Child: understanding the determinants of flourishing in the early years [Oral presentation] DOHaD ANZPac
- 16. Jackie Davis (2024). ORIGINS: A platform for research discovery [Webinar with Marie Rickert Hong]

 Documenting Hope: https://documentinghope.com/about-us/
- 17. Jackie Davis (2024). ORIGINS: A platform for research discovery [Oral presentation] Paediatrics and Population Health at New York University, United States
- 18. Jackie Davis (2025). ORIGINS and understanding engagement in digital wellbeing programs in the perinatal period [Oral presentation] Evidence Finders, UWA, Women's Reproductive Health, Perth
- 19. Jackie Davis (2025). STARS for kids: Strengths-based, Tiered, Accessible, Resources and Supports [Poster presentation] INRICH Workshop, United Kingdom
- 20. Lisa Gibson (2024). A pilot study to promote engagement in nature in pre-school children [Oral presentation] Public Health Association of Australia, Perth
- 21. Nina D'Vaz (2024). The ORIGINS Project: Analyses of inflammation, microbiome and metabolome in a West Australian longitudinal birth cohort [Poster presentation] International Congress of Mucosal Immunology, Denmark
- 22. Poonam Pannu (2024). The ORIGINS Project: Strengthening partnerships through nested research projects [Oral presentation] Public Health Association of Australia, Perth
- 23. Poonam Pannu (2024). ORIGINS study: Nutrition profile of pregnant women in a longitudinal birth cohort in Western Australia [Oral presentation] Nutrition Society of Australia, Sydney
- 24. Poonam Pannu (2024). The ORIGINS Project: A cross-sectional analysis of the nutrition profile of pregnant women in a longitudinal birth cohort [Oral presentation] Ramsay Research Month, Perth
- 25. Sarah Whalan (2024). The ORIGINS project: Nutrition profile of pregnant women in a longitudinal birth cohort in Western Australia [Oral and poster presentation] DOHaD ANZPac
- 26. Sarah Whalan (2024). The ORIGINS project: Nutrition profile of pregnant women in a longitudinal birth cohort in Western Australia [Oral presentation] CAHS Symposium, Perth
- 27. Sarah Whalan (2025). ORIGINS as an opportunity for research [Oral presentation] Acute & Disease Prevention in Children Research Group, ECU, Perth
- 28. Sasha Fenton (2024). Change in diet quality and dietary intakes from pregnancy to one year after birth: A longitudinal analysis in Australian women [Oral presentation] Health in Preconception, Pregnancy and Postpartum Early and Mid Career Researcher Collective (HiPPP EMR-C)
- 29. Sini Lambiase, Jo Cole, Bec Young and Jackie Davis (2025). STARS for kids & The Flourishing Child [Oral presentation] JHC Social Work Team, Perth
- 30. Sini Lambiase (2025). STARS CRE Event [Oral presentation] Sydney Children's Hospital Randwick, Sydney
- 31. Zenobia Talati (2024). The ORIGINS Project: Pregnancy and Birth Cohort Profile [Oral presentation] DOHaD ANZPac
- 32. Zenobia Talati (2024). Low iron among children within the ORIGINS birth cohort [Oral presentation] Public Health Association of Australia

- 33. Zenobia Talati (2024). Benefits beyond play: Investigating the impact of playgroups on mental health outcomes in parents from the ORIGINS cohort [Oral presentation] WA Psychological Science Conference, Perth
- 34. Zenobia Talati (2024). Low iron among children within the ORIGINS birth cohort [Oral presentation] Ramsay Research Month, Perth