

PhD Project: Uncovering a Hidden Culprit of Heart Disease

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This PhD project offers a unique opportunity to delve into the Raine Study, a rich dataset following parents and their offspring over three decades. The project focuses on identifying primary aldosteronism, a prevalent and treatable cause of heart disease, within the Raine Study population.

Project Background

- The Raine Study, launched in 1989-1991, recruited 2,900 pregnant women in Perth, Western Australia.
- It has followed the parents (Generation 1, Gen1) and their offspring (Generation 2, Gen2) for over 3 decades collecting socio-demographic, lifestyle, medical and biochemical information.
- This project will investigate approx. 2,500 Gen1 and 1,500 Gen2 (age 34) for primary aldosteronism, a condition marked by excessive aldosterone production from the adrenal glands.
- Primary aldosteronism is a hidden cause of high blood pressure in Australians, affecting approximately 14% of hypertensive adults. It is frequently undiagnosed but treatable.
- The project is funded by the Department of Health, Government of Western Australia, Cohort Studies - Research Support Program and involves researchers from the Medical School at the University of WA, Monash University and other institutions and hospitals across Australia.

Project Significance

This project will be the first to assess:

- Prevalence of primary aldosteronism in Western Australia.
- Its impact on cardiovascular health in young adults.
- The role of genetics in the disease.

PhD Candidate Profile

- A highly motivated student with excellent communication and organizational skills
- Strong background in biomedical science
- Proficient in statistical software (SPSS or STATA preferred)

Overall, this PhD project offers a unique opportunity to contribute to uncovering a significant, underdiagnosed cause of cardiovascular disease.

Whilst a Perth based candidate is preferred for this project, other projects related to aldosterone and renal, bone and other health conditions be will be available for prospective PhD students based in Victoria.

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