
# Fully funded Oral Health PhD Opportunity

**Who are we?**

The Murdoch Children's Research Institute (MCRI) is home to significant scientific discoveries. We believe there is an answer, a cure or a better treatment for every childhood condition — and we're determined to find it.

We are a diverse team of world-leading researchers, doctors, engineers, and hardworking professionals in corporate and scientific services from all corners of the world with one shared goal — to transform child health worldwide.

Our strength lies in our partnership and co-location with The Royal Children's Hospital and the University of Melbourne — the Melbourne Children's Campus. This rare model amplifies opportunities to quickly translate research into clinical care.

Together, we share a powerful vision: re-imagine the future of child health.

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**Position Overview**
The Inflammatory Origins group within the Infection and Immunity Theme is led by Prof David Burgner, an experienced paediatric infectious diseases physician and researcher. The group aims to understand why some children are more susceptible to infection and inflammation, and what the long-term effects are, especially on cardiovascular and metabolic health. The group also has a major interest in oral health and seeks to integrate oral health into broader life course studies. Together with our research collaborators, 3Shape, Denmark, we are pleased to offer this unique opportunity for a suitably qualified oral health professional to undertake an exciting PhD project within our group.

**Project Overview**
The COVID-19 pandemic has highlighted the urgent need for improved options for tele-health, including tele-dentistry. Three-dimensional scanning promises considerable potential for recording and monitoring oral health. Although traditionally restricted clinically to orthodontics and prosthodontics, recent rapid developments in 3D technologies will expand its application to a much broader range of clinical and research settings including remote oral health assessment and automatized diagnostics.

This PhD project will evaluate the validity of an intra-oral scanner to measure the presence and severity of dental caries and developmental defects in children of different ages in both primary and secondary dentition. The project will be nested within a number of large population-based and clinical high-risk cohorts at the Melbourne Children's Campus. The PhD involves performing clinical assessments, including dental examinations and 3D intra oral scanning, on children, with a substantial analytical component to validate the intra oral scanner for population health research and as a diagnostic and patient management tool.

The successful applicant will join a dynamic, supportive and productive research team based in Melbourne, Australia and Copenhagen, Denmark. The candidate will be based at the MCRI but will work closely with the product development team at 3Shape (Denmark). The PhD program will include a full-time PhD stipend, and potential funding for international travel, including part of the candidature to be based in Denmark. Part-time candidature may be considered.

For further information, interested applicants should contact Dr Mihiri Silva (Mihiri.Silva@mcri.edu.au) with:

- Cover letter explaining why they have chosen to purse a PhD and what they can bring to the role.
- CV (including academic references and details of their WAM (applicants should have H1 Honours and a WAM of >80, or equivalent)
- Evidence of clinical qualification, AHPRA registration as a dentist or oral health therapist

Applications close 17 July 2020 for PhD to commence September 2020 (negotiable)