**Project Title:** Genotype and Phenotype of Osteogenesis Imperfecta in Vietnam  
**Code:** CHW26

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<th>Host School/ Institute</th>
<th>Address: Department of Endocrinology, The Children's Hospital at Westmead Clinical School, Westmead, 2145</th>
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**Project Type:** Design

**Project Category:** Bone, Endocrinology & Metabolism, Genetics

**Project Keywords:**
1. Osteogenesis imperfecta  
2. Genotype  
3. Phenotype  
4. Next generation sequencing

**Project Description:**

Osteogenesis Imperfecta (OI) is a congenital bone fragility disorder with a broad clinical phenotype and genetic heterogeneity. The Children’s Hospital at Westmead is a world leader in the diagnosis and management of children and adolescents with OI. As such, we have been involved in helping establish treatment strategies for children with OI in a number of countries throughout the Asia-Pacific region, including Vietnam.

Next generation sequencing enables genetic evaluation of the whole genome for a fraction of the cost of single gene sequencing. We have established strong collaborations with the Diamantina Institute in Brisbane, which has expertise in the use of this technology for identification of genes involved in OI including COL1 and IFITM5.

This project will involve developing a protocol for the clinical and genetic evaluation of large cohort of children in Vietnam (Hanoi, Hue and Ho Chi Minh City) with OI. The project has the potential to form the basis of a Masters/PhD project.