**PROJECT RESUME**

**TITLE**: How does hip joint size and morphology, and skeletal age, influence the risk of avascular necrosis in the paediatric hip?

Legg-Calve-Perthes disease (Perthes) is a condition in which blood supply to the proximal femur is disrupted, leading to avascular necrosis of the bone in the femoral head (the secondary ossification centre). Why the blood supply is disrupted is unknown, although we do know that the condition is more common in boys than in girls and that children who get Perthes disease tend to be skeletally immature for their (chronological) age. The incidence is about 2.5 per 100,000 children aged 0–14 years, with an estimated 500 new cases per year in the UK. Perthes disease is one of the most common and most poorly understood disorders encountered by paediatric orthopaedic surgeons. The aims of the research project are to try to understand why are more boys than girls affected by Perthes, and why skeletally immaturity may predispose to Perthes.

File: USVRS – Project Resume 202324 NOWLAN