

## **CoRIPS Research Award 110**

**Lisa Field**

### ***Mapping the Evolution of Technique in Orthopaedic Radiography (METeOR)***

**£9,544.98 awarded**

#### **Background**

Despite the development of an array of imaging modalities over the last 4 decades, projectional radiography remains the mainstay of clinical practice across the world.<sup>1,2</sup> Advances in technology, roles and research knowledge have occurred, however literature surrounding techniques is relatively sparse<sup>3-13</sup> It is unclear whether this reflects modern practice, indeed anecdotal evidence suggests significant local and national variation. Without a strong evidence base, neither techniques advocated in textbooks, nor variations in practice can be considered gold standard. With increasing emphasis on patient choice technique variation may result in further imaging or inconsistent follow up investigations. This multiphase pragmatic study will investigate technique variation in 4 common orthopaedic examinations, followed by an electronic survey of all NHS radiography departments and HEI's. The final phase will involve telephone interviews to explore drivers for practice variation with key informants drawn from a purposive sample of respondents.

#### **Anticipated Outcomes**

This study will establish the current baseline practice used in clinical and academic departments and identify the gaps in the evidence base, and barriers, to knowledge utilisation. It will also provide an understanding of why sites have evolved practice including the drivers for change, whether these are technological or people based. A brief literature review has demonstrated the contradictory evidence surrounding radiographic techniques for these 4 common orthopaedic areas and an absence of definitive clinical guidance on the optimal projections to support clinical decision making. It is anticipated that this study will generate many future studies that will continue to explore the fundamental basis of radiographic technique and promote evidence based practice.