Primary Care and Health Sciences

Research Project Proforma (School of Medicine)

Research Topics: **Keywords (up to 5)**	• Osteoarthritis (OA) • Radiographic imaging • Diagnosis • Management
Supervisor: **Job Title:** **Department:** **Email Address:** **Telephone:** **Webpage link:**	Michelle Marshall Research Fellow Musculoskeletal Clinical Epidemiology and Imaging Research Institute for Primary Care and Health Sciences m.marshall@keele.ac.uk 734872 www.keele.ac.uk/pchs/
Type of projects offered (delete as appropriate)	Intercalation (1 year)

(1) Outline the broad aims of your research (max 150 words):

To image or not to image? That is the question - the use of imaging for the diagnosis and management of osteoarthritis in primary care

Osteoarthritis (OA) is the most common cause of musculoskeletal pain and the fastest-growing cause of disability. In the UK it is a frequent reason for consultation in primary care, where the condition is predominantly diagnosed and managed. National guidance since 1998 has recommended that X-rays should not be used to diagnose OA, except when other conditions are suspected and an X-ray can help exclude them. Decisions about referral for secondary care are also recommended to be based on symptoms and response to core treatments rather than X-ray findings as there is poor correlation between symptoms and radiographic change. There is very little information on what proportion of patients with known or suspected OA are now being referred for an X-ray. Unnecessary X-rays carry the risk that treatment decisions may be made on the basis of structural changes that are not strongly related to the symptoms patients experience, avoidable radiation dose, additional costs with small benefits (if any), and additional workload for imaging services.

(2) Indicate the skills/techniques the student will learn (max 100 words)

The exact skills the student will learn will vary depending on the project, but we would expect these to consist of some or all of the following: literature reviewing, critical appraisal, data analysis and academic writing. Additionally, we usually would support the student attending at least one formal Masters module run by the university such as Research Methods in Health and would expect the student to attend the centre's internal and external seminar programme, methodology seminars and other training workshops/seminars. The student would also be encouraged to present their work in different settings such as Arthritis Research UK Primary Care Centre Postgraduate Symposium and possibly at a regional or national conference.