Science and Technology in Medicine

Research Project Proforma (School of Medicine)

Research Title: Keywords (up to 5)	Developing methods to measure muscle morphology using 2D Ultrasound Muscle morphology ultrasound
Supervisor: Job Title: Department: Email Address: Telephone: Webpage link:	Anand Pandyan Professor of Rehabilitation Technology SHAR/ISTM a.d.pandyan@keele.ac.uk 01782734252 https://www.keele.ac.uk/healthandrehabilitation/staff/staffa-z/anandpandyan/
Type of projects offered (delete as appropriate)	Intercalation (1 year)

(1) Outline the broad aims of your research and its medical relevance (150 words):

Secondary changes to muscle structure are common in people with long term disabling neurological and conditions (e.g. stroke, CP, MS, fraility, etc). We have very little understanding of what these changes are *in-viva*. In order to be in a position to get a better understanding of these pathological changes and to develop new treatment we need to be in a position to quantify the pathological changes. This project(s) will therefore aim to develop protocols for the valid and reliable non-invasive measurement of muscle morphology.

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

Use of 2D ultrasound in musculoskletal imaging

Dissection of fresh frozen cadavers

Please submit this form electronically to Prof Divya Maitreyi Chari on
d.chari@keele.ac.uk by 31 July 2015