**Appendix 1: Search Strategy**

The following keywords were used to search the PubMed database. These were automatically mapped to MesH vocabulary where possible. The search was conducted on 12th March 2017 by two independent reviewers and limited to publications in the English language.

anterior cruciate AND quadriceps activation

OR

(anterior cruciate OR knee) AND corticomotor

OR

(anterior cruciate OR knee) AND arthrogenic

OR

(anterior cruciate) OR knee) AND quadriceps inhibition

OR

(anterior cruciate) OR knee) AND brain activation

OR

(anterior cruciate) OR knee) AND neuroplasticity

OR

(anterior cruciate) OR knee) AND cortical activity

OR

quadriceps activation following knee injuries

OR

arthrogenic muscle inhibition