The specialist section of this issue contains papers on upper limb biomechanics presented at the IMechE Conference ‘Engineering the Upper Limb’ held in London in April 2008.

It is largely true to say that the majority of biomechanics papers in this Journal and similar journals concern the lower limb. While the lower limb has received the greatest attention over the past two decades, the functional requirements of the rapidly increasing numbers of older people are now moving the emphasis towards the upper limb. The increased incidence of both stroke and degenerative joint disease in this group can lead to serious challenges to independence. Scientific approaches to joint replacement and rehabilitation must depend upon a clear understanding of the underlying mechanics.

The majority of papers in this Special Section concern the shoulder complex, with the remaining two being devoted to wrist and hand. This balance reflects the increased interest in shoulder biomechanics over the last few years, with real progress in understanding and in the development of novel prostheses. We hope that this issue will be of interest to all of the readership and that it may stimulate further interest in upper limb biomechanics.

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