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| Complete List of Authors: | Bonshahi, Anosh; University of Cambridge, Human Anatomy Centre, Anatomy Building, Department of Physiology, Development and Neuroscience  
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Brassett, Cecilia; University of Cambridge, Human Anatomy Centre, Anatomy Building, Department of Physiology, Development and Neuroscience  
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Title Page

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Full name, department, institution, city, and country of all co-authors:

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Full name, postal address, and e-mail of the corresponding author: Dr Ghansham Biyani, Department of Anaesthesiology, Box 93, Addenbrooke’s Hospital, Cambridge University Hospitals, Hills Road, Cambridge, CB2 0QQ, UK

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Ethical approval was obtained from the Human Biology Research Ethics Committee, University of Cambridge (HBREC.2019.27). A total of 18 volunteers were recruited and consented to scanning of both upper limbs (n=36 arms). Volunteers were positioned supine, with the upper limb to be scanned abducted and externally rotated. Defined axes were drawn using anatomical landmarks, which served as reference points for USG mapping of the MCNF at 2cm intervals (Figure 1). A preliminary scan with a 12MHz probe was performed to locate the MCNF in the midarm, which was identified by its relation to the basilic vein and by its distribution around the medial epicondyle (ME), and then traced towards the axilla. With the MCNF centred on the monitor, mapping proceeded along the x-axis from 16cm proximal to 12cm distal to the ME. Smaller branches were traced using a 22MHz probe. The perpendicular distance between the x-axis and centre of the probe was measured, serving as the y-coordinate. MCNF coordinates, and sites where the nerve branched or crossed the x-axis were input into a custom Python 3.3 program, which generated Microsoft Excel line charts representing the MCNF.
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Multiple ‘2D diagrams’ showing considerable variability in the course and branching pattern of the MCNF (8 anatomical models in total; 4 of each side).

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