Appendix 2: correlation between hand width, hand span, hand length and BMI with nerve the diameter


| Measurement location | Cases | Hand width |  | Hand span |  | Hand length |  | BMI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thumb (radial branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2423 \\ & 0.3328 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.3709 \\ & 0.1297 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{array}{r} -0.1326 \\ 0.6 \end{array}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.4917 \\ & 0.0382 \end{aligned}$ |
| Thumb (ulnar branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.3158 \\ & 0.2018 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.4150 \\ & 0.0868 \end{aligned}$ | $\begin{aligned} & \text { rs } \\ & = \\ & P= \end{aligned}$ | $\begin{gathered} -0.189 \\ 0.4525 \end{gathered}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{array}{r} 0.2906 \\ 0.242 \end{array}$ |
| Index finger (radial branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1829 \\ & 0.4677 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2965 \\ & 0.2322 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1332 \\ & 0.5983 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1449 \\ & 0.5663 \end{aligned}$ |
| Index finger (ulnar branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1818 \\ & 0.4703 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1074 \\ & 0.6713 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{array}{r} -0.2867 \\ 0.2488 \end{array}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.3969 \\ & 0.1029 \end{aligned}$ |
| Middle finger (radial branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2386 \\ & 0.3403 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1575 \\ & 0.5324 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{array}{r} -0.1267 \\ 0.6164 \end{array}$ | $\begin{aligned} & \mathrm{r}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.227 \\ & 0.365 \end{aligned}$ |
| Middle finger (ulnar branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2873 \\ & 0.2476 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2672 \\ & 0.2838 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{array}{r} -0.2688 \\ 0.2808 \end{array}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.3318 \\ & 0.1786 \end{aligned}$ |
| Ring finger (radial branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1705 \\ & 0.4989 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.0677 \\ & 0.7896 \end{aligned}$ | $\begin{aligned} & \mathrm{r}= \\ & P= \end{aligned}$ | $\begin{gathered} -0.401 \\ 0.0991 \end{gathered}$ |  | $\begin{aligned} & 0.1365 \\ & 0.5891 \end{aligned}$ |
| Ring finger (ulnar branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{array}{r} 0.076 \\ 0.7644 \end{array}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{array}{r} -0.1329 \\ 0.5991 \end{array}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{array}{r} -0.4111 \\ 0.0901 \end{array}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.0178 \\ & 0.9441 \end{aligned}$ |
| Small finger (radial branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.1618 \\ & 0.5211 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.0222 \\ & 0.9302 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & -0.263 \\ & 0.2917 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2395 \\ & 0.3384 \end{aligned}$ |
| Small finger (ulnar branch) <br> Flexor zone 2 | 18 | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.2214 \\ & 0.3772 \end{aligned}$ | $\begin{aligned} & \mathrm{rs}= \\ & P= \end{aligned}$ | $\begin{aligned} & 0.3218 \\ & 0.1929 \end{aligned}$ | $\begin{aligned} & r= \\ & P= \end{aligned}$ | $\begin{aligned} & -0.188 \\ & 0.4551 \end{aligned}$ |  | $\begin{aligned} & 0.2647 \\ & 0.2885 \end{aligned}$ |



| Measurement location | Cases | Hand width |  | Hand span |  | Hand length |  | BMI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median nerve proximal to TCL | 18 | $\mathrm{rs}=$ | 0.2499 | $\mathrm{rs}=$ | -0.0392 | $r=$ | -0.3405 | $r=$ | 0.0428 |
|  |  | $P=$ | 0.3173 | $P=$ | 0.8772 | $P=$ | 0.1667 | $P=$ | 0.8659 |
| Flexor zone 4 |  |  |  |  |  |  |  |  |  |
| Ulnar nerve proximal to TCL | 18 | $\mathrm{rs}=$ | 0.381 | $\mathrm{rs}=$ | 0.5348 | $r=$ | 0.1521 | $r=$ | 0.3575 |
|  |  | $P=$ | 0.1188 | $P=$ | 0.0222 | $P=$ | 0.5467 | $P=$ | 0.1453 |
| Flexor zone 4 |  |  |  |  |  |  |  |  |  |
| Median nerve distal to TCL | 18 | $\mathrm{rs}=$ | 0.4522 | $\mathrm{rs}=$ | 0.2664 | $\mathrm{rs}=$ | 0.4386 | $\mathrm{rs}=$ | 0.3359 |
|  |  | $P=$ | 0.0595 | $P=$ | 0.2853 | $P=$ | 0.0686 | $P=$ | 0.1729 |
| Flexor zone 4 |  |  |  |  |  |  |  |  |  |
| Median nerve at the wrist crease | 18 | $\mathrm{rs}=$ | -0.0527 | $\mathrm{rs}=$ | -0.3252 | $r=$ | -0.3444 | $r=$ | -0.0178 |
|  |  | $P=$ | 0.8356 | $P=$ | 0.1878 | $P=$ | 0.1616 | $P=$ | 0.9441 |
| Flexor zone 5 |  |  |  |  |  |  |  |  |  |
| Ulnar nerve at the wrist crease | 17 | $\mathrm{rs}=$ | 0.2509 | $\mathrm{rs}=$ | 0.3816 | $r=$ | -0.1406 | $r=$ | 0.3713 |
|  |  | $P=$ | 0.3313 | $P=$ | 0.1307 | $P=$ | 0.5903 | $P=$ | 0.1423 |
| Flexor zone 5 |  |  |  |  |  |  |  |  |  |

$r=$ Pearson correlation coefficient
rs = Spearman's Rank correlation coefficient

