**Comparison of cochlear dimensions in University of Pretoria Cochlear Spiral Reference Framework (CSRF) study (italics) with cochlear dimensions reported in the literature**

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| **Dimension** | **Researcher** | **Method** | **Population group** | **N** | **Results [Mean ± SD (Range)]** |
| **Cochlear length** | Avci et al. (2014) | µCT | German | 16 | 9.20 ± 0.40 mm |
| Avci et al. (2017) | µCT | German | 10 | 9.35 ± 0.31 mm (9.00 – 10.03 mm) |
| Dimopoulos and Muren (1990) | Casts | Swedish | 95 | 8.58 ± 0.45 mm (7.00 - 9.80 mm) |
| Erixon et al. (2009) | Casts | Swedish | 51 | 9.30 mm |
| Escudé et al. (2006) | CT | French | 42 | 9.23 ± 0.53 mm (7.9 - 10.8 mm) |
| Fernando et al. (2011) | CT | Filipino | 388 | R = 7.55 mm  L = 7.60 mm |
| Krombach et al. (2005) | CT | German | 120 | R = 9.12 ± 0.60 mm (8.10-10.40 mm)  L = 9.11 ± 0.60 mm (8.00-10.10 mm) |
| Martinez-Monedero et al. (2011) | CT | American | 124 | 6.80 - 10.30 ± 1.41 mm |
| Pietsch et al. (2017) | µCT  Casts | German | 108  30 | 9.30 ± 0.30 mm  9.20 ± 0.40 mm |
| Shin et al. (2013) | µCT | Korean | 39 | 9.70 mm |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *8.03 ± 1.47 (5.48 – 10.16 mm)* |
| **Width of the basal turn** | Avci et al. (2014) | µCT | German | 16 | 7.00 ± 0.30 mm |
| Avci et al. (2017) | µCT | German | 10 | 7.04 ± 0.34 mm (6.71 – 7.63 mm) |
| Braun et al. (2012) | µCT | German | 1 | 7.70 mm |
| Dimopoulos and Muren (1990) | Casts | Swedish | 95 | 6.77 ± 0.35 mm (6.00 - 7.50 mm) |
| Erixon et al. (2009) | Casts | Swedish | 73 | 6.80 ± 0.46 mm (5.60 - 8.20 mm) |
| Escudé et al. (2006) | CT | French | 42 | 6.99 ± 0.37 mm |
| Martinez-Monedero et al. (2011) | CT | American | 124 | 5.20 -7.80 ± 1.13 mm |
| Pietsch et al. (2017) | µCT  Casts | German | 108  30 | 7.00 ± 0.30 mm  6.80 ± 0.40 mm |
| Shin et al. (2013) | µCT | Korean | 39 | 7.00 mm |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *6.16 ± 1.09 mm (4.38 – 8.13 mm)* |
| **Width of the middle turn** | Braun et al. (2012) | µCT | German | 1 | 4.35 mm |
| Erixon et al. (2009) | Casts | Swedish | 73 | 3.80 ± 0.25 mm (3.30 -4.30 mm) |
| Shin et al. (2013) | µCT | Korean | 39 | 3.90 mm |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *3.80 ± 0.63 mm (2.61 – 4.80 mm)* |
| **Total cochlear height** | Avci et al. (2014) | µCT | German | 16 | 4.40 ± 0.30 mm |
| Braun et al. (2012) | µCT | German | 1 | 4.06 mm |
| Dimopoulos and Muren (1990) | Casts | Swedish | 95 | 3.93 ± 0.40 mm (3.10 -5.00 mm) |
| Erixon et al. (2009) | Casts | Swedish | 73 | 3.90 ± 0.37 mm (3.30 - 4.80 mm) |
| Fernando et al. (2011) | CT | Filipino | 388 | R = 4.36 mm (3.30 - 5.10 mm)  L = 4.34 mm (3.40-5.20 mm) |
| Pietsch et al. (2017) | µCT  Casts | German | 108  30 | 4.40 ± 0.40 mm  4.00 ± 0.20 mm |
| Shin et al. (2013) | µCT | Korean | 39 | 3.80 mm |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *5.01 ± 1.01 mm (2.82 – 6.93 mm)* |
| **Height of the basal turn** | Braun et al. (2012) | µCT | German | 1 | 1.90 mm |
| Erixon et al. (2009) | Casts | Swedish | 73 | 2.10 ± 0.20 mm (1.60 -2.60 mm) |
| Krombach et al. (2005) | CT | German | 120 | 1.76 ± 0.03 mm (0.90 -2.20 mm) |
| Shin et al. (2013) | µCT | Korean | 39 | 1.90 mm |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *R = 3.64 ± 0.55 mm (2.24 – 4.64 mm)*  *L = 2.65 ± 0.51 mm (1.53 – 3.92 mm)* |
| **Height of the middle turn** | Braun et al. (2012) | µCT | German | 1 | 1.30 mm |
| Erixon et al. (2009) | Casts | Swedish | 73 | 1.20 ± 0.17 mm (0.80 - 1.60 mm) |
| Shin et al. (2013) | µCT | Korean | 39 | 1.80 mm |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *R = 2.49 ± 0.44 mm (1.57 – 3.65 mm)*  *L = 1.94 ± 0.44 mm (1.02 – 3.10 mm)* |
| **Metric length** | Erixon et al. (2009) | Casts | Swedish | 58 | 42.00 ± 1.96 mm (38.60 – 45.60 mm) |
| Erixon and Rask-Andersen (2013) | Casts | Swedish | 51 | 41.20 ± 1.86 mm (37.60 – 44.90 mm) |
| Escudé et al. (2006) | CT | French | 42 | 34.40 ± 2.20 mm (30.76 – 37.41 mm) |
| Kawano et al. (1996) | Histology | Japanese | 8 | 40.81 ± 1.97 mm (37.93 – 43.81 mm) |
| Pietsch et al. (2017) | Casts and µCT | German | 138 | 36.00 – 46.00 mm |
| Sato et al. (1991) | Histology | American | 18 | 38.64 ± 3.19 mm (32.70 – 43.20 mm) |
| Wurfel et al. (2014) | CBCT | German | 436 | 37.90 ± 1.98 mm (30.80 – 43.20 mm) |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *31.40 ± 4.83 mm (23.29 – 39.33 mm)* |
| **Modiolar inlet diameter** | Martinez-Monedero et al. (2011) | CT | American | 124 | 3.67 ± 0.14 mm (3.42 – 3.82) |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *1.92 ± 0.72 mm (0.79 – 3.17 mm)* |
| **Angular length** | Biedron et al. (2009) | Histology | German | 157 | 2 < 2.50  54 = 2.50  84 > 2.50 and < 2.75  17 > 2.50 and < 3.00 |
| Erixon et al. (2009) | Casts | Swedish | 73 | 2.60 turns (2.20 – 2.90 turns) /929° (774° – 1 037°) |
| Fernando et al. (2011) | CT | Filipino | 194 | 179 = 2.5 turns  15 = 2.75 turns |
| Kawano et al. (1996) | Histology | Japanese | 84 | 2.69 ± 0.11 turns |
| Pietsch et al. (2017) | Casts  µCT | German | 108  30 | 965.00 ± 40.00º  976.00 ± 45.00º |
| Shin et al. (2013) | µCT | Korean | 39 | 2.54 ± 0.09 turns (2.36 – 2.80 turns) /  850.70° (916.20° - 1 007.70°) |
| Tian et al. (2006) | Histology |  | 9 | 6 = 2.5  3 = 3 |
| *UP CSRF study* | *µCT temporal bones* | *South African* | *27* | *991.48 ± 44.20º (912.00 – 1078.00º)* |
| n: Sample size SD: Standard deviation µCT: Micro Computed Tomography CT: Computed Tomography  R: Right L: Left | | | | | |

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