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Modelling hand skin temperature in relation to body compositionKatarina Katić^{a*}, Rongling Li^{a1}, Boris Kingma^{b2}, Wim Zeiler^a

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Corresponding author: Katarina Katic;*Abstract**

Skin temperature is a challenging parameter to predict due to the complex interaction of physical and physiological variations. Previous studies concerning the correlation of regional physiological characteristics and body composition showed that obese people have higher hand skin temperature compared to the normal weight people. To predict hand skin temperature in a different environment, a two-node hand thermophysiological model was developed and validated with published experimental data. In addition, a sensitivity analysis was performed which showed that the variations in skin blood flow and blood temperature are most influential on hand skin temperature. The hand model was

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