

Sex determination from fingerprint ridge density: a response to Gungadin (A reaction to his article published in Volume 2, Number 2, July-December 2008)

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Sir,

We read with interest a recently published article titled "*Sex determination from fingerprint ridge density*" by **Dr. Sudesh Gungadin** on a vital issue of sex determination from fingerprint density¹. We wish to congratulate the author for his work on this issue. However, we would like seek few clarifications and contribute on this all important issue.

The fingerprint pattern is an absolute proof of identity. No two fingers have ever been found to have identical prints. Owing to endless variations in fingerprints it has been speculated that there is one chance in sixty four thousand millions of two persons having identical fingerprints². The author studied the gender differences in fingerprint ridge density in south Indian population that in addition would help the investigating authorities by restricting their search to a particular gender. The study was conducted on subjects of south Indian origin 18-60 years and the results were found to be encouraging.

It needs to be highlighted here that health status of subjects is an important exclusion criteria in such study as fingerprint pattern and finger ridge density is know to alter in various diseases². On similar lines, stature and weight of an individual may have a role on finger ridge density, probably the reason why the authors recorded the height and weight of each subject¹. However since they have not commented on this aspect we would like to know if these factors had any effect on the finger print ridge density in their study.

The authors counted number of ridges per 25mm² area for each finger and calculated the mean value from all ten fingers that represented the approximate number of ridges for a particular individual. It is surprising to note that the mean value derived from ten fingers in all 500 subjects appears in whole figures, as apparent from table 1. We feel that the mean value from all ten

fingers should appear up to one decimal place at least in few subjects, if not all.

Author's explanation and confirmation on above aspects is desirable so that the study is helpful for future researchers.

REFERENCES:

1. Gungadin S. Sex determination from fingerprint ridge density. *Internet Journal of Medical Update* 2007;2(2): http://www.geocities.com/agnihotrimed/paper01_jul-dec2007.htm
2. Reddy KSN. The essentials of forensic medicine and toxicology, 22nd edition. Hyderabad: Devi KS;2003:70.

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AUTHOR RESPONDS:

Thank you very much for your kind interest in my work. Well I wish to mention that height and weight of the subjects were recorded taking into consideration that they could effect the ridge count, and it was found that these two parameters had no influence on the ridge count. As far as the mean value is concerned, even the conducted by Marc Acree from USA did not show decimal value. This means that my study supports the one carried out by Acree.

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