

**STATISTICS IN THE LEGAL AND MEDICAL PROFESSIONS**

John S. Croucher, Macquarie University, Sydney, Australia

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**ABSTRACT**

With the increasing use of complex data in the legal and medical profession it is no wonder that lawyers, judges and medical professionals are sometimes baffled by the vast array of data that passes their way. And to make matters worse, an unscrupulous 'expert witness' can almost seem to make the data say almost anything they choose, while doctors may inadvertently present misleading statements to patients based on an ignorance of statistics. This has led to erroneous conclusions based on the evidence that have become known as a variety of 'fallacies', including those of both the prosecutor and defence. Whether or not the underlying mathematics is fully understood, it is essential that practitioners can correctly interpret the information provided by 'experts'.

Keywords: *statistics, Bayes theorem, probability, law, medicine*