



Catching the fraudsters in medical research

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The prestigious UK journal, *Anaesthesia* is uncovering scientific fraud that is triggering international investigations at the rate of one every two weeks according to its editor-in-chief, Dr Andrew Klein.

Dr Klein, who is speaking at the New Zealand Anaesthesia Annual Scientific Meeting + AQUA this week [August 21-24, 2019], says in recent years there have been increasing numbers of overt scientific misconduct, including plagiarism, duplicate publication, image manipulation, and data fabrication. He says this in turn has challenged the traditional trust relationships between researchers, editors and readers of medical journals, including the public.

Anaesthesia was at the centre of a media storm in 2017 after it published work by UK anaesthetist, Dr John Carlisle who revealed the extent of the fraud problem. Dr Carlisle had developed a statistical analysis computer program known as the Carlisle Method that uncovered a raft of scientific fraud exposing some very high profile studies.

Dr Klein, a cardiothoracic anaesthetist from Cambridge in the UK, says since that very public exposure, the *New England Journal of Medicine* has validated Dr Carlisle's work independently. One of the trials Dr Carlisle marked as unlikely to be genuinely randomised was the very influential trial of Mediterranean diets. The trial was subsequently retracted and republished.

The Carlisle Method is a novel statistical method for detecting "unlikely" distributions of data in randomised control trials (RCT), the gold standard for medical research. *Anaesthesia* is the first journal to screen all RCTs submitted to the journal since 2017.

"Since we have started, we have identified more than 30 potentially fraudulent submissions which might otherwise have been published, and, in the last few months, we have been requesting investigations at the rate of one a fortnight," says Dr Klein.

In his presentation in Queenstown Dr Klein will discuss how medical research sector can clean up the scientific record and get rid of "fake data". "This is imperative," he says, "otherwise, doctors, and ultimately our patients, are being deceived and may be suffering as a result."