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Integrative medicine and the point of credulity

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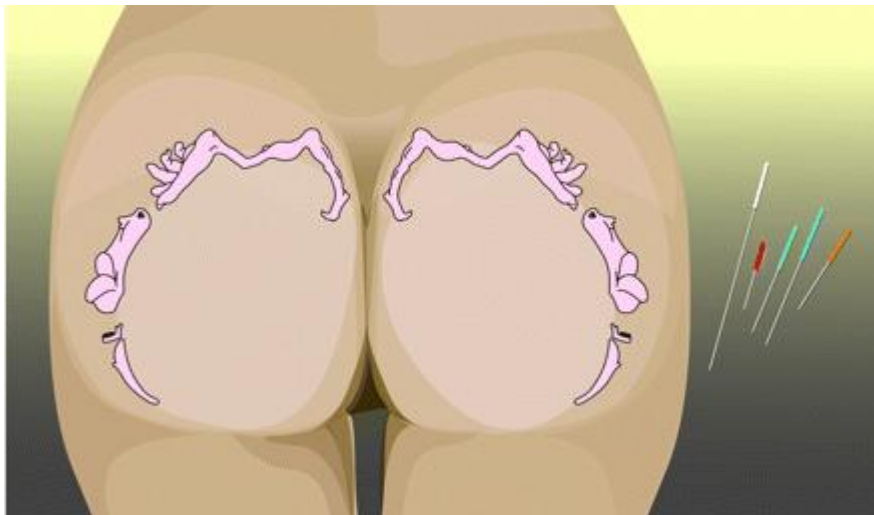
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So called integrative medicine should not be used as a way of smuggling alternative practices into rational medicine by way of lowered standards of critical thinking. Failure to detect an obvious hoax is not an encouraging sign

It is a common, and rarely unsuccessful, ploy to change the name of something unpleasant in order to give it greater acceptability. However, changing the name of Windscale nuclear plant to Sellafield after an accident in 1981 made it no less radioactive, and the new name quickly acquires all the connotations of the old. [↓](#)



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Increasing concern has been expressed about the presence of complementary and alternative medicine (CAM) on the NHS. For instance, the House of Commons

Science and Technology Committee recently reported critically on the evidence base for the use of homoeopathy in the NHS.¹ Nationally and internationally, there has been a move to disguise the nature of CAM by renaming it “integrative medicine.”^{2 3} Of course, it is something of an insult to medical practitioners to suggest that they do not take into account their patients’ individuality, autonomy, and views as part of their daily practice. It is certainly a key tenet of evidence based medicine⁴ and to suggest that so called integrative medicine is somehow confined to the alternative world is a canard.

It is sometimes possible to test the status of a notion (the terms hypothesis and theory should be reserved for ideas that are related to at least some form of evidence) by a process of opposition. This involves testing the status of the notion by looking at the limits to which it can be pushed.⁵ Furthermore, there is an excellent tradition of testing research areas of dubious authenticity by means of a hoax. In 1996, Alan Sokal had a paper accepted in a cultural studies journal, in which he parodied postmodern philosophy and cultural studies by making a series of exaggerated, wrong, and meaningless statements about the potential progressive or liberatory epistemology of quantum physics in the style of the field.⁵ This he subsequently described in a book, bluntly called *Intellectual Impostures*.⁶ In the spirit of Sokal, therefore, I responded to a mass circulated email invitation to submit a paper to something called “The Jerusalem Conference on Integrative Medicine.”

The invitation announced:

An International Conference on Integrative Medicine will be held in October 2010 in Jerusalem. It will be a meeting of professionals in the field of medicine from around the world that will deal with ways to unite the scientific principles of modern medicine with the holistic principles of alternative medicine.... The scientific committee of the convention is still open to accept additional topics to the conference program.

On 1 June 2010, I sent them the following invented nonsense:

I write to ask if you would be interested in a presentation on my recent work on integrative medicine. I am an embryologist by background, with an extensive publication record, in journals including Nature and the Proceedings of the Royal Society, and have written an award winning text book on medical embryology. Recently, as a result of my developmental studies on human embryos, I have discovered a new version of reflexology, which identifies a homunculus represented in the human body, over the area of the buttocks. The homunculus is inverted, such that the head is represented in the inferior position, the left buttock corresponds to the right hand side of the body, and the lateral aspect is represented medially. As with reflexology, the “map” responds to needling, as in acupuncture, and to gentle suction, such as cupping. In my studies, responses are stronger and of more therapeutic value

than those of auricular or conventional reflexology. In some cases, the map can be used for diagnostic purposes.

Although I resisted the temptation to draw an analogy with the mappings of phrenology, I still had it in mind, and the reference to gentle suction might have been taken by a sceptical reader to refer to the idea of kissing the point of credulity.

The organisers replied on the same day.

Dear Prof. McLachlan

I thank you for your interesting and enriching mail. In order to bring the proposal to the Scientific Committee I would appreciate it if you could send me an Abstract of your proposed lecture. And a short C.V.

Yours Sincerely

[name redacted]

The Jerusalem International Conference on Integrative Medicine

I replied on the following day:

Abstract

*Intensive study of the development of early human embryos indicates that there is a reflexology style homunculus represented in the human body, over the area of the buttocks. This homunculus corresponds to areas of clonal expansion ("Blaschko lines**"), in which compartments of the body have clear ontological relationships with corresponding areas of the posterior flanks. The homunculus is inverted, such that the head is represented in the inferior position, the left buttock corresponds to the right hand side of the body, and the lateral aspect is represented medially. The Blaschko lines mediate energy flows to parent areas, and lead to significant responses to appropriate stimuli. As with reflexology, the "map" responds to needling, as in acupuncture, and to gentle suction, such as cupping. Responses are stronger and of more therapeutic value than those of auricular or conventional reflexology. In some cases, the map can be used for diagnostic purposes. In both therapeutic and diagnostic interventions, a full case history must be taken, in order to define the best methods of treatment. In the presentation, anonymised case histories, "testimonies" and positive outcomes will be presented. The methodology does not lend itself to randomised double blind controlled trials, for obvious reasons.*

Obviously, the involvement of a sensitive area of the body poses special challenges. Ethical practice is of significant concern. Informed consent must be obtained from all patients in writing, before either therapeutic or diagnostic procedures are commenced. Although exposure of the gluteal region is

recommended, procedures can be carried out using draping if this is required in order to gain patient cooperation. Chaperones or same sex practitioners are recommended in the case of female patients.

Unfortunately, this novel paradigm may meet with closed minds and automatic rejection. Patience and understanding of “closed” mindsets is essential in order to advance this new discovery in a way commensurate with its importance.

**See for example <http://dermnetnz.org/pathology/blaschko-lines.html>.*

My initial email and abstract were constructed to include appeals to authority, hints of conspiracy theories, and “scienciness,” but with an absence of evidence or plausibility. I received this from the organisers on 26 July 2010.

Dear Prof. John C. McLachlan,

You have sent a proposal to the The (sic) Jerusalem International Conference on Integrative Medicine. We are happy to inform you that the Scientific Committee has reached it's (sic) decision and that your paper has been accepted and you will be able to present your lecture. The time frame will be 15-20 minutes. Considering the tight schedule, I will appreciate if you'll confirm your participation in the convention.

Unfortunately, I did not believe that I wished to carry the joke so far as to actually attend, although part of me was tempted.

I fully accept that this is just one instance, relating to a particular conference. And conference abstracts are refereed less stringently than full papers. But I also believe that the idea I proposed was intrinsically and self evidently ridiculous. Whereas Sokal's hoax parodied the incomprehensibility and reductio ad absurdum of some proponents of cultural studies' approach to natural sciences, this particular hoax parodied the absurdity and credulity of so called integrative medicine. I do not believe that rational medicine could have been fooled with something so intrinsically ridiculous as in this case. Minimum standards of common sense should, I think, have led to a polite but firm rejection—or at least further inquiry. Alternative medicine is not noted for rigorous inquiry, for research designed to prove the null hypothesis, but rather accepts notions on face value. Therefore a face value test is fair.

I did also, to be honest, feel a little uncomfortable about it. There was an element of deception involved, and academic intercourse generally relies, to some degree, on good faith. I sent off the abstract in a spirit of fun, but then hesitated about making it public. I did decline the invitation (though I have never been to Jerusalem, and would have enjoyed the trip) but I didn't want to cause harms by taking up a conference slot. But in the end, just as so called gentle teasing may reveal structures to the anatomist, so a different kind of gentle teasing may reveal something to the philosopher, and may promote an element of self awareness in proponents of

alternative medicine, no matter what grand title it is disguised under. It provides, at the least, an opportunity for reflective practice, which I hope proves of some benefit to us all.

Notes

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Footnotes

- Competing interests: The author has completed the Unified Competing Interest form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declares that he has no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; and no other relationships or activities that could appear to have influenced the submitted work.
- Provenance and peer review: Not commissioned; not externally peer reviewed.

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