Skeptic

a person who looks for the simplest explanation first, but is willing to consider other possibnlities in the light of unambigous evidence

Economics as a science An evening with Sue Nicholson Undercover for cancer NZ Skeptics in the Pub

new zealand

www.skeptics.org.nz

number 93 - spring 2009

content

Economics as a science	3
An evening with Sue Nicholson	3
Newsfront	10
Chair-entity's report	14
Undercover for Cancer	15
Bent Spoon Award	16
Forum	17
How the NZ Skeptics in the Pub got started	18
The vertical limit for randomised trials	19

ISSN - 1172-062X

Contributions

Contributions are welcome and should be sent to:

David Riddell 122 Woodlands Rd RD1 Hamilton Email: number8@ihug.co.nz

Deadline for next issue:

December 10 2009

Letters for the Forum may be edited as space requires - up to 250 words is preferred. Please indicate the publication and date of all clippings for the Newsfront.

Material supplied by email or CD is appreciated.

Permission is given to other nonprofit skeptical organisations to reprint material from this publication provided the author and NZ Skeptic are acknowledged.

Opinions expressed in the New Zealand Skeptic are those of the individual authors and do not necessarily represent the views of NZ Skeptics (Inc.) or its officers.

Subscription details are available from www.skeptics.org.nz or PO Box 29-492, Christchurch.

Another cracker of a conference

THE 2009 annual NZ Skeptics Conference in Wellington was its usual mix of good times and thought-provoking material, though with some unique touches. The Kingsgate Hotel was a rather more luxurious venue than we're used to; the few problems that arose were mostly due to the high number of late enrolments, making this one of the largest gatherings in recent years.

Friday night entertainment was the first hint things would be a bit different, when a barbershop quartet, Quarter Tone, appeared to serenade us, closing with a rousing skeptical anthem. The right-hand side of the room then trounced the left side in a quiz competition, with each side in turn having to come up with an obscure question to stump the other. We all learned something, not least what a Mongolian Death Worm can do to you.

Saturday saw a huge variety of presentations, from Hugh Young's epic poem on the evils of circumcision, a subject he has written on previously (NZ Skeptic 86), to Brian Easton's perspectives on the scientific status of economics (see this issue). Also in this issue is Loretta Marron, who put her scientific training to good use taking on the purveyors of dodgy alternative therapies in Australia, after being herself diagnosed with breast cancer. Then there was Matthew Dentith putting conspiracy theories in their proper philosophical perspective, John Robinson on how refutations of the Club of Rome's gloomy predictions don't stand close scrutiny, and Bernard Beckett, who gave a passionate exposition of what he thinks science is, and why he thinks evolutionary psychology isn't it. Look for more of these in upcoming issues of the NZ Skeptic. Or, if you can't wait, there's audio of many of them available through the NZ Skeptics website, courtesy of the Science Media Centre.

The dinner was a memorable occasion – first the food, then a skeptically themed offering from Wellington Theatresports group The Improvisors. The Italian Renaissance song about the view from Sarah Palin's window and the motion of UFOs was a highlight, although one of the performers had a bit of trouble picking that the channeled message from Vlad the Impaler was that it's okay to smack your kids.

The main event for Sunday was the AGM, which as usual was a relaxed and painless exercise, followed by Matthew Gerrie on the fallibility of memory, and why police line-ups may have put many innocent people behind bars. Hugely en-

joyable all round, I'll definitely be back next year.

Lavid

Economics as a science

Brian Easton

Economics has been called the Dismal Science. But to what extent are economics scientific, and economists scientists? This article is based on a presentation to the NZ Skeptics 2009 conference in Wellington, 26 September.

WANT to reflect on the extent WANT to reflect on the extent to which economics is a science and the extent to which it is not. In doing this I come from the approach of someone who was trained a scientist, who continues to think of himself as one, and who is heavily influenced by the philosophy of Karl Popper. I suppose that makes me a sceptic.

The point about sceptics is that they continually test the theories they hold against the facts, and try to improve them. As such, they are what Thomas Kuhn called revolutionaries,

challenging and replacing the conventional wisdom. I am going to address some of these false gods directly. Perhaps you hold some dear. Please understand I am just applying the standards of scientific scepticism to them as you would expect to be applied elsewhere.

Popper points out that even though you know your

best you have until a better

one comes along. I will give some examples where scientific economics has held - even still holds – theories knowing their weaknesses, and where we may make progress in the not too distant future - one hopes.

Popper said the most important Platonic dialogue is The Apology in which Socrates reflects on the Delphic Oracle's utterance that he is the wisest of men. He concludes that he is only wise because he knows how ignorant he is. As Isaac Newton described himself, he was 'only a child playing on the beach, while vast oceans of truth lie undiscovered before me'

Newton also said 'If I have seen further than others, it is by



theories will be replaced by The Sceptical Economist: Brian Easton better ones, hold on to the addresses the 2009 Skeptics Conference.

standing upon the shoulders of giants.' Science is the accumulation of wisdom. We would do well to recall and understand the giants of our science before we claim some particular insight.

Some of the greatest minds of the last two hundred years were economists - some were scientists.

I want to begin by contrasting the subtlety of economics and the crudity of its critics. A couple of examples will illustrate my point.

I am frequently told that economists believe that per capita Gross Domestic Product is the measure of welfare of a nation. That is a strange claim since

every economist knows that the more relevant measure is Net National Income. GDP includes depreciation and measures the income of a region, not of the people who belong to the region. Some of the profits of the region go to investors outside it.

Such things are overlooked by the critics, but even more extraordinarily, they only rehash what economists have always known. I do mean 'always'. The creator of the statistical base out of which GDP comes was Si-

mon Kuznets who wrote in his original report in 1934: "the welfare of a nation can scarcely be inferred from a measurement of national income". But you won't find him quoted in the standard critiques of GDP, nor John Kenneth Galbraith who wrote an elegant chapter decrying its use as a measure of welfare in his *Affluent Society* some 50 years ago.

I am not denying that some people use GDP as the measure of welfare, or that GDP is an economists' measure. My point is that properly trained economists use it for other purposes – the purposes for which it was designed.

You might say, why in the last 75 years have economists not constructed a better measure of welfare? The short answer is that we have tried, and we have not been able to develop a satisfactory one.

Today there is another attempt by a committee led by Joseph Stiglitz and Amartya Sen, two other giants of the profession. What I found interesting is that they have concluded there is no single measure of economic welfare, and are looking for a number of indicators. Which rather undermines all the critics who have their own single measure which they claim is better than GDP. There is no unique single measure of a nation's welfare. Had there been, economists would have developed it - around 74 years ago. One must never assume that the best economists are as stupid as their critics.

A couple of caveats – I shall be referring to annual market activity, and when I make comparisons through time I shall be referring to volume GDP, that is production adjusted for the change in prices. Incidentally, GDP was originally derived for tracking unemployment. Today we know that it is not a very good short run indicator for this purpose, that economic activity and unemployment track differently. So even if the activity contraction has ended we may expect rising unemployment for a while yet.

I am likely to be deluged in the next few weeks by sentiments of 'hooray the recession is over and things are getting better', followed up a little later by 'you economists misled us, things have not improved that much'.

> My second illustration is that I am often told that economics depends upon unlimited economic growth. That cannot be true since many giants of the economics profession - Thomas Malthus, David Ricardo, Karl Marx, John Maynard Keynes and Joseph Schumpeter, for instance – were stagnationists who expected economic growth to come to an end; Keynes wrote of the 'euthanasia of the rentier'. What he meant, and others thought too, was that as capital was accumulated, the return on capital would fall, until there would be no incentive to invest, and economic growth would stop. This is a consequence of the laws of thermodynamics. As Paul Samuelson has pointed out, economics is grounded in those laws - without them there would be no trade-offs, a fundamental notion of economics.

The difficulty with this stagnationist approach was that per capita incomes in the rich world quadrupled in the 180 years between Ricardo and Schumpeter. You can set up auxiliary hypotheses to explain the inconsistency but in the 1950s, as the data became available, it became evident that a theory of economic growth dominated by pure capital accumulation was inconsistent with the facts.

We now know, following a famous 1956 paper by Bob Solow, that what he called 'technical change' adds to economic growth. By technical change he meant "a shorthand expression for any kind of shift in the production function. Thus slowdowns, speedups, improvements in the education of the labour force, and all sorts of things will appear as 'technical change'."

The story of how the scientific community has misinterpreted this economic research for its own political purposes belongs to another occasion. The point to be made here is that it is simply not true that economics says that economic growth is necessary. When there is no more technical change, the growth may stop but there will still be a role for economics.

Were the critics a little more subtle, they could instead argue that the current economic system is dependent upon economic growth. The technical mechanism is that the true profit rate is close to the growth rate; so no growth, no profits. When growth exhausts itself the nature of the economic system would change. If you want to pursue the implications of that you might read Malthus, Ricardo, Marx, Keynes and Schumpeter. So there are two kinds of economics. One is what competent economists do, and the other is articulated by the politicians, journalists and business people who have misunderstood professional economics, often for self-serving ends. This self-serving is the key reason why this misrepresentation dominates the public discourse. Why bother to get it right if ignorance supports one's ends? It is the scientist who pursues getting it right as an end in itself.

I was taken by a history of Lysenko whose pseudo-science, which confused phenotype with genotype, was imposed for political ends to the detriment of Soviet Agriculture. What struck me was that a large proportion - perhaps 95 percent - of the Soviet biological profession simply accepted the faulty paradigm. Of the remainder, about half got on with doing proper science and the other half ended up in Siberian concentration camps - or worse. But that so many Soviet biologists got it desperately wrong does not prove that biology is not a science.

I'd like to think there would be a higher proportion of the economics profession who could see the fallacies in an imposed economics paradigm, and certainly fewer of us end up in concentration camps. One day there will be a very interesting analysis of how so many economists were misled into thinking the macroeconomics which has led to the current crisis had so much validity. But not all did, and economics can claim that it is being corrected by the facts.

Notice that I am distinguishing between what economics is and

what economists – and others such as business people, journalists and politicians – think. If you use a definition that economics is what economists do, then deciding whether economics is a science becomes a question of whether economists are scientists, an empirical question.

Probably all the giants of economics were scientists in the sense that they practised a scientific method which Popper would recognise. When we look at shorter members of the profession – even those who were followers of the giants – we observe another way of pursuing economics.

A distinction

To make the division clear, I shall contrast sceptics with the believers. Sceptics are the scientists who are continually testing the hypotheses they hold against alternative hypotheses. For them knowledge is tentative but it also progresses as it replaces existing hypotheses with better ones – typically as a result of an encounter with facts.

On the other side are the believers, who hold a known truth which is invulnerable to challenge. Facts do not challenge their truths, or cause them to be replaced with better ones. Rather the task is to explain the facts within the framework of belief; if necessary they will ignore inconvenient facts.

Consider the belief in the policies which we call Rogernomics, and which are more widely known as 'neo-conservative economics'. They were applied in New Zealand between 1985 and 1993, and the Rogernomics believers conclude they worked because their theory says so. As it happens the economic growth rate for New Zealand did not speed up under Rogernomics. Indeed per capita GDP stagnated from 1985 to 1993, so it was the same in 1995 as it been eight years earlier. It was in that period that we got badly behind Australia.

I should like to tell you how Rogernomes explain this stagnation since they said their theory promised economic growth. I'd really like to know, since I have a theory which explains why the stagnation happened and I would like to test it against alternative theories. Unfortunately the Rogernomes simply ignore the fact of stagnation. I know of no case of any of them mentioning it, let alone giving any account of why it happened contrary to their theory and promises.

You will detect here the frustration of a scientist. I get better theories by comparing mine with others using the facts that test them. But how can I do that if they ignore the facts?

There is also a policy issue here. It is hard not to conclude that Rogernomics and its Ruthanasia successor failed. There is currently a committee to consider how we might speed up economic growth and catch up with Australia in GDP per capita terms. At least three of its five members were Rogernomes. It will be interesting to see to what extent they address the failure of the policies they advocated in the 1980s and 1990s.

Another group you need to be wary of is those who are paid by their employers to represent their business interest. While they do a good job, sometimes they reflect the firm's or sector's interests.

More fundamentally, as Galbraith pointed out, we are the slaves of the conventional wisdom which is a mix of what Keynes called the thinkings of 'defunct economists', our aspirations which are not always based on reality, and the theories which support the hegemony of the dominant interest groups of a society.

Recession over?

While I was meditating on such things, journalists announced the 'recession was officially over' because GDP increased 0.1 percent between the March 09 and the June 09 quarter. What gave the journalists the authority to claim that the recession was officially over? There is no official definition of a recession in New Zealand; there is not even a standard one. The journalists probably did not have the foggiest idea of what economists mean by a 'recession', other than they knew it was a bad thing.

The number which led to these pronouncements was a minuscule *plus* 0.1 percent of GDP, but equally it could have been presented as *minus* 0.2 percent of GDP per capita. Moreover, there is a margin of error for any figure the Government Statistician reports, and the quarter by quarter GDP change is subject to a large one. They are also subject to revision – five of the eight quarters



"I'd rather we don't mention this in the annual report."

of the last two years were revised with the new announcement. The average growth rate in the last decade's boom was about 0.9 percent a quarter. So the June quarter outcome was not only that output per head was falling, but since economic capacity is continuing to grow so that the underutilised capacity was increasing in the quarter. Bad news for the unemployed and putative unemployed.

We sceptics cannot be sure, but don't be surprised if the hoopla seems silly in a year's time. As the Minister of Finance said: "Tough times are still ahead". Probably. My assessment is that there are very tough times still ahead of us.

My irritation arises, not only because of the poor quality of so much of the commentary, but because it sets the tone for the public. I am likely to be deluged in the next few weeks by sentiments of 'hooray the recession is over and things are getting better', followed up a little later by 'you economists misled us, things have not improved that much'.

So we face confusing stories. Much of economics may be scientific but many economists are not, and in any case most of the public learn their economics from those who could not possibly be considered professional economists.

As one last attempt to convince you that economics is a science – and like all sciences complex and subtle – let me look at three areas where economics is progressing. Note how in each case the evolution is due to a dialogue between theory and fact, and how like all scientists I make no apology if the current theory is to be replaced by a better one, albeit one which stands on the shoulder of the old one.

Economic Behaviour

First there is the theory of individual economic behaviour. For a long time economists have held, in an increasingly rigorous form, the notion of rational economic man-Homo economicus. He-he is always male-takes all that is known into consideration and pursues his own self-interest by maximising his utility which reflects only his welfare and does not vary through time. A little introspection suggests that we don't actually do this; the theory held on for the simple scientific reason that there was not a better one to replace it. When we use it for policy purposes, many of us make ad hoc adjustments to bring H. economicus closer to actual behaviour

Recently some economists have been looking at the psychological literature to obtain insights into human behaviour. Among my heroes are Richard Thaler, Matthew Rabin and Daniel Kahneman, the psychologist who received the Nobel prize in economics in 2002.

While economics does not yet have a rigorous theory, it is certainly making progress. Economics evolves. I admit there is a lot of resistance to behavioural economics. It includes those who are comfortable with the old paradigm and don't want to learn anything new. (Keynes remarked we rarely learn anything fundamental after the age of 30.) It also includes those with a political agenda who think that behavioural economics justifies the state over-ruling individual preferences (it doesn't). So, Lysenko-like, their politics overrules science. Meanwhile you will find increasing application of the theory; the Kiwi saver scheme was influenced by Thalerian principles, although hardly anyone mentioned it.

Happiness and Material Consumption

My second example illustrates that economics, like other sciences, can have an anomaly which has yet to be resolved. Two hundred years ago, Jeremy Bentham said the more you consumed the happier you were. That has been a central assumption in economics ever since. But is it true?

We have only had the data to test the proposition in recent years. The most important involves asking whether people are happy and comparing their responses with their incomes, after controlling for other variables. There is some research which indicates that the subjective responses are consistent with objective data, but of course the area is treacherous.

When we pull together the available evidence we find that a rise in average material consumption in poorer societies seems to be associated with rising average happiness. However that does not seem to apply to affluent societies. The best example from the longest data series is that levels of consumption have doubled in the United States over the last 60 years, but there has been no rise in average happiness there.

Even so, while rising average incomes do not increase happiness over time, those with higher incomes at any point in time are happier than those with lower incomes. But not that much happier. Some work Ryan You and I have done shows that the happiness score goes up from 8.1 to 8.3 when annual income rises from \$20,000 to \$120,000 – by 0.2 points on a 0 to 10 scale. In contrast happiness falls by 0.5 points if an employed person becomes unemployed, which suggests that a job is far more important for happiness than the income it generates. Even more dramatically, the happiness of a married woman who becomes separated falls 0.6 points on average and the man who moves from married to separated falls 1.2 points.

So income is not as important in determining happiness as a range of other – not economic – things. Insofar as income is important, it seems to be because it demonstrates one is higher up the pecking order, rather than the additional material consumption it generates. What this all means is unclear. It's an anomaly. Probably the best source if you are interested in the subject is Richard Layard's book *Happiness*, although I don't agree with everything he says.

The Global Financial Crisis

There is a major row going on in economics which has been precipitated by the Global Financial Crisis. The disagreement has long been there but new facts and new events have exposed it.

Following the Great Depression of the 1930s, Keynes wrote

economics

his General Theory of Employment, Interest and Money, which became the basis for what we know as the Keynesian paradigm of how the macro-economy works. By the 1960s it was challenged by monetarism (the expression was not invented until 1968) which evolved to a point where it is said the founders such

as Milton Friedman would no longer recognise it. This alternative paradigm (there is quite a lot of the Keynesian apparatus in monetarism) became dominant for policy purposes at the US Federal Reserve and in the popular press and business community, but not in the academy which divided between - in the jargon - 'saltwater economists' who were Keynesians (generally) working in American universities on the east water' ones who were anti-

Keynesians usually working in inland American universities.

In the academy this was all good competitive fun, with lashings of rhetoric – and some personal abuse. In the policy domain there was an uneasy truce. The arrival of the Global Financial Crisis has now turned the truce into open public war. Think of the disagreement over whether light was a wave or a particle – but shift it to the twenty-first century with its greater and instantaneous public communication and of a more immediate policy concern.

I've tried to put the argument fairly, but I don't want to seem to be sitting on the fence. Briefly my position is I am with the Keynesians, although I have doubts about American Keynesianism which is too influenced by the peculiarities of the US government arrangements. Moreover I don't think the Americans have thought enough about the particularities of their economy, whose currency is also the international means of exchange.



and west coasts and 'fresh John Maynard Keynes: "We rarely learn water' ones who were anti- anything fundamental after the age of 30."

You may be surprised that I should be a Keynesian given that Keynes published his book almost three-quarters of a century ago, about the same time as Bohr's complementarity, Heisenberg's uncertainty, and Pauli's exclusion principles and Schrodinger's equation. They all remain in the foundations of quantum mechanics but the subject has evolved. So has economics.

So let me finish with the cryptic remark that I reckon that progress will not just happen with the Global Financial Crisis testing the two paradigms. There will have to be a new theoretical innovation based upon some previously unavailable empirical data. I speculate that it will be the incorporation of balance sheets into Keynesianism. Keynes knew about them, but there was not enough material to incorporate them into his account – except crudely.

However there is a bigger lesson here. Paradigmatic battles are not resolved as easily in

> the social sciences as they are in the natural sciences – although none of them has lasted as long as the one about the nature of light. It is worth recalling Planck's law:

"A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."

That may be true in physics. It is even more so in the social sciences.

Conclusion

There is a strongly scientific element in much of economics and many economists are scientists. Regrettably, many of those who use economics do not do so in a scientific way, which is why it is right to be sceptical about what you are told are economic truths. But that does not mean that none exist.

Brian Easton is an independent scholar especially interested in New Zealand. His writings and research are primarily concerned with its economics, history, politics, sociology and culture.

An Evening with Sue Nicholson

Noel Townsley

Yet another Sensing Murder veteran struts her stuff.

A S a professed skeptic I have been unconvinced by psychics who claim they can communicate with dead people. However, those who do believe such a connection is possible invariably point out that as I have never been to a psychic session, I am not in a position to criticise. To counter that, I decided to attend an evening with the wellknown psychic Sue Nicholson, who was appearing at the Glen Eden Playhouse Theatre. The price for that experience was \$50 per ticket.

On her website Sue describes herself as a "gifted psychic medium", an ability she claims to have had from early childhood. One-day psychic development workshops were available from Sue, coinciding with her current nationwide tour, \$235 each, but that did include lunch. A maximum of 30 persons per session. If you want a personal reading from her, there is a three-year waiting list. There are three different CDs at \$30 each, and her book A Call From The Other Side is available at \$35. She can also be booked for house blessings, and claims "she successfully cleared negative energy from a large corporation in Wellington following the suicide of an employee on the premises".

The Evening

My companion and I thought it best to take a seat near the back

so we could better observe the night's proceedings. However, as almost every seat downstairs was taken, we made our way to the upper level. By the time the show began, there were only four empty seats in the whole theatre.

Shortly after 7.30pm Sue Nicholson was introduced by her business agent, and entered the stage wearing a brightly coloured flowing outfit.

She quickly told us she could feel plenty of energy, and that there was "spirit" waiting to get through already. In fact, so much spirit about and so little time, that she would not be able to address everyone's needs. Sue explained she is gifted with the ability to see, hear, and feel spirit, unlike many who may have only one of those gifts. She then told us about some of her earlier shows; someone's pet pig turned up from the other side one night – animals also make it to the other side she said. Is it just people's pets that made it there, or is it every animal that once lived? She further advised there was no Hell, and everyone, good or bad, was in the same place on the other side. A disappointment, no doubt, to those who hope that the likes of Hitler and Pol Pot are on slow roast somewhere.

She then explained that the five empty seats placed on the stage were for spirit, so we needn't worry, she was not going to ask members of the audience to come up on stage. She had been fortunate in the past to have a spirit usherette turn up to help keep the more unruly in line she told us.

Next up was a short prayer to help us on our journey. We were asked to meditate, and Sue would transport us, and our angels, through a doorway with our name on it (or our birth name if we were adopted), which we were told we would see ahead of us, and once we had gone through to the other side, we would see the most beautiful garden we had ever seen. From there she told us to move on to the beautiful beach and park bench with our name on it that we would see in the distance. There we would spend time with our angels and deceased relatives. Some of us may be given something to take back, she advised.

After a few minutes chatting with all of them, she told us to go over to a waterfall to our right, the most beautiful waterfall we had ever seen, and to step into it, so that the waters would go through our bodies and relieve us of any aches and pains we had. Miraculously, we would notice our clothes were dry as we stepped out. Sadly, Sue said, we now had to make our way back through the doorway. She

Flaky diagnostic tool fans toxin scare fire

HARD on the heels of the Bent Spoon awarded to the *Poisoning Paradise* 'documentary' (see p. 16), the NZ Herald has produced an appalling piece on alleged pesticide poisoning of people and wildlife in Auckland (27 September).

According to the report, Waiheke Island environmental group Ocean Aware claimed samples from marine birds, oysters and dog vomit, taken from Waiheke and Rangitoto Islands, tested positive for brodifacoum and 1080.

The samples were tested by EAV machine, though nothing in the article explained what this means. EAV stands for 'Electroacupuncture according to Voll' - in the 1950s Reinhold Voll combined acupuncture theory with galvanic skin differentials to produce a machine which, when homeopathic solutions were introduced into the circuit, could be used to 'diagnose' all manner of toxin-related ailments (see NZ Skeptic 56). Needless to say the machine has no scientific basis

A woman who became mildly ill after eating local snapper also tested positive for brodifacoum, said Ocean Aware's Sarah Silverstar. Brodifacoum poisoning, however, causes internal bleeding, which the woman was not reported to suffer from, and does not otherwise generate feelings of illness. This is what makes it such an effective rat poison.

The electroacupuncture testing was done after the Department

of Conservation dropped 147 tonnes of brodifacoum bait on Rangitoto and Motutapu Islands in August. Soon after, several marine animals were found dead on Auckland's North Shore, and dogs which had walked on the beaches became ill or died. At least some of these cases were later linked to tetrodotoxin, a bacterial toxin found in several marine organisms, most famously the Japanese fugu puffer fish.

DoC, in alliance with Auckland Regional Public Health, MAF Biosecurity, Auckland Regional Council and North Shore and Auckland City Councils, says independent scientists have carried out extensive testings and determined none of the deaths were caused by brodifacoum.

DoC spokeswoman Nicola Vallance said the department offered to have independent scientists test Silverstar's samples, but she declined.

Dioxin risk over-rated

At least Bob Brockie brought some sense to the fraught subject of environmental toxins with his Dominion Post column (6 July) on the dioxin scare in New Plymouth.

Residents there were up in arms when it was discovered soils in a local park had minute traces of dioxin. But as Bob Brockie pointed out, dioxin at far higher levels than found in Taranaki generates no symptoms other than a form of acne. When Ukrainian presidential candidate Viktor Yushchenko had his soup laced with dioxin he was badly scarred, but today his face has largely healed and he appears in good health. Following the Seveso chemical factory explosion in 1976 residents were found to have up to 10,000 times the typical human tissue concentration. Fifteen years of testing revealed no excess cancer, stillbirths or genetic disorders – just the temporary acne.

Sadly, says Brockie, this is an argument that science and objectivity can never win.

"The testimony of one or two residents carries more weight in New Plymouth than truckloads of refuting world statistics."

Conspiracy? What conspiracy?

The Sunday Star Times (20 September) had a good piece on Matthew Dentith's study of conspiracy theories at Auckland University. Why, asked reporter Mark Broatch, do otherwise ruthlessly rational people reject out of hand most conspiracies, yet give time and angst to ideas others find quite wacky?

Matthew Dentith says the problem is two-fold. Schools don't teach critical thinking skills that might help us unravel our confusion, and we humans are exceptional at compartmentalising our beliefs.

"It's really easy to be absolutely staunch in, say, your adherence to evolutionary theory by natural selection. But when it comes to medical quackery..." Look for more on this subject from Matthew Dentith in an upcoming issue of NZ Skeptic.

Placebo prescriptions widespread

Three out of four New Zealand doctors have prescribed placebo medications to patients, according to medical researcher Shaun Holt, who says the practice could cost the taxpayer several million dollars (Dominion Post 4 July).

Seventy-two percent of the 157 doctors surveyed admitted giving placebos, including vitamins, herbal supplements, salt water injections and sugar pills.

"But what surprised us was the most commonly prescribed placebos were antibiotics, which is obviously a concern because of the rise of antibiotic resistance and potential side-effects for patients," Dr Holt said.

Patients' unjustified demands for medication was cited as the most common reason for prescribing placebos (34 percent), followed by non-specific complaints (25 percent), and exhausting other treatment options (24 percent).

Dr Holt said he believed placebos were ethical as long as the doctor considered them to be in the best interests of the patient. "The placebo effect is quite powerful," he said.

Rather than prescribing medications which were ineffective for the condition treated – such as antibiotics for viral infections – he said "there could be an argument for bringing back sugar pills, which are safer, just as effective and certainly cheaper." Pharmac medical director Peter Moodie said data showed doctors were prescribing antibiotics responsibly. He agreed it was not acceptable to waste money prescribing medicines with no effect.

Alternative therapies 'too good to be true'

The Sunday News (20 September) has come up with a surprisingly sceptical article about alternative health treatments. Belief, says Barbara Docherty, a registered nurse and clinical lecturer at the Auckland University School of Nursing, is becoming a most important factor in a world where 'alternative health' has become a major growth industry.

After noting the most popular alternative therapies include naturopathy, chiropractic, homeopathy herbal remedies and acupuncture, she asks if this is the stuff of quacks and witch doctors.

"Despite a wealth of available information, there is little or no strong scientific evidence and very little regulation about who and what is safe. Herbal and natural medicines, although widely used, are not subject to the same scrutiny as prescription or overthe-counter medications."

Skeptics might question the value of her advice to check out practitioners' qualifications carefully – an ineffective treatment is ineffective no matter who is administering it – but not her final comment: "…bear in mind that anything that sounds too good to be true probably is."

Ghost hunters hit the capital

Those who were at the conference this year will already know about James Gilberd and his Paranormal Occurrences team. They got a write-up in the Capital Times recently (26 August - 1 September). Reporter Dawn Tratt joined them for a ghost hunt at the Museum of Wellington City and Sea.

Claiming to be sceptical, though carrying baggage from a Pentecostal upbringing, Tratt's scariest moment came when her colleague mistook one of the investigators, sitting on the floor, for a ghost.

It was only after she left that things supposedly got really spooky. One of the team says she saw the spirit of a Maori man.

"I felt like he was upset with James. He kept trying to tell me something but I couldn't pick up what it was."

It may, just possibly, be significant that the museum ran paranormal tours during one of the winter public programmes three years ago, and marketing manager Angela Varelas says they are looking to bring them back early next year.

As for James Gilberd, he brings a distinctly sceptical approach to his ghost-hunting, treating it as a form of performance art. In his day job he runs a photographic gallery, Photospace, and his conference presentation was mainly about the technical glitches that cameras, and particular digital cameras, can have that lead people to think they've photographed a ghost. Something else to look out for in an upcoming NZ Skeptic.

From Page 9

apologised for the brevity of the visit, but knew people were anxious for her to begin contact with spirit. We could spend longer on the other side -25 minutes in fact - by using her CD (available in the foyer during the break).

Spirits aren't maimed, they only look that way

By now the spirits were jostling to get through, so Sue's first guest was a Tommy, or maybe Thomas - seems he wasn't sure of his own name - who had crutches. Sue explained that people presented themselves as they were on this side – that is maimed. unwell etc, but that was just so we could identify them. There were no immediate takers for Tommy, but one woman did finally put her hand up, she said she had a grandfather, Thomas, but he didn't use crutches. This anomaly did not deter Sue, who informed the woman, granddad Thomas had been waiting a long time to come through and so was a bit grumpy having had to push past the other spirits to be first, but he did love her, and was watching over her.

Following this Sue gave us some general descriptions of other spirits trying to get through, no names this time, just a woman or man with chest pains, breathing problems, or other vague symptoms. Once someone recognised the description and put their hand up, Sue would tell them what the spirit had to say. One spirit identified by an audience participant was a cousin, and another apparently the deceased friend of the participant's living daughter. At one point while Sue was conveying a message to one woman, she seemed to sense another spirit coming through and asked the woman who Margaret or Maggie was. The woman replied "Margaret is my sister" and pointed to the woman sitting next to her. After a brief chat with the spirit, it seemed there was a message *for* Margaret. Sue ad-

A vague description such as "chest pains" could be interpreted as anything from heart disease to lung cancer, leaving the field wide open for a connection.

vised Margaret her angels were looking out for her, and she could expect things to improve in coming months, good news.

Sue explained that our guardian angels, whilst they look out for us, don't actively interfere with our lives in any way. What their purpose is exactly, I am still not sure.

Sue saw a car roll over many times with four people in it. As there was no response, she clarified - not all may have died, but at least one person in the car did pass over. A hand went up. "Who died?" Sue asks. "A friend," was the reply. "Ah, a friend," Sue said, "Yes, that's what they are saying to me, a friend, a friend, yes, yes, do you understand that?" Apparently they did. The friend was later revealed by the woman to have actually been her partner. The spirit then had a message for her, he said he loved her, but he understood it was time for her to move on with her life, and was happy for her to find a new partner, if she so desired.

Next she asked us about the gifts we had received during our earlier journey to the other side, and offered to interpret these for us. One person reported receiving a gold ring; Sue said she could see it above them, that it

was a symbol of everlasting love. She could also see a number above them, 5, a lucky number, Sue said. Someone got a locket, another, the word love, another a gold heart and the word love.

It was time for a break, and Sue mentioned there was a new series of *Sensing Murder* to be screened later in the year. There was an audible "Oooh" from many in the audience.

After a chance to view the merchandise, Sue was back on stage with a pen and paper and a list of spirits who had come to her during the break, which she proceeded to work her way through. First up was someone in a navy uniform: no immediate takers, but someone did have a cousin in the navy – that must be it, because they got a message from them.

Sue then described someone with cuts to their wrists. One woman raised her hand, she had a son who overdosed and died. "Did he have cuts?" Sue asked. "No," was the reply. No one else put their hand up, so Sue talked to the spirit again. It seemed he had wanted to cut himself, but didn't do it – it was her son after all. He said he felt alienated and that no one understood him. "Do you understand that?" Sue asked, apparently she did. Two people claimed one spirit, but it was the person to the right that Sue directed her information to. However it didn't seem to be going too well. The person to the left vigorously waved their hand, it seems the information was for them instead, Sue apologised to the first person and moved to the second. An easy mistake for the spirit to make I guess.

A ghostly budgie

Others followed, and then it was back to more interpretations of our meditative gifts received on the other side. More hearts, love, flowers. Occasionally Sue saw something additional - she saw a bird arrive over one woman: it turned out she had a pet budgie as a child, so it must have been that the woman said. Another woman said her guardian angel had turned to stone on the other side. No need to worry, stone is solid and unmoving, Sue advised - it was just the angel showing her the solidity of their commitment to her.

Another spirit was identified by a gentleman in the second row as a departed relative. Sue conveyed a few messages and then remarked, "You're thinking of going into business on your own, aren't you?" "No, done that, and never again!" was the man's immediate reply. Sue conversed for a moment with the spirit, yes, seems they were warning him *not* to go into business on his own. "Do you understand that?" Sue asked. I am sure he did.

Then it was back to Sue's list. Another name this time, and jokingly I leant over to my companion and asked, is that your father? (still very much alive). Sue must have noticed my movement as she announced it was for the woman with glasses and looked directly towards my companion. Fortunately, a few seats away there was another woman, also with glasses, who was certain this spirit was for her. Sue's agent, who's job it was to take the microphone around, pointed out that this woman had already had a turn, but with my companion now trying to hide under the seat. Sue was sure it was for this woman. "Are you trying to do a family tree?" Sue asked this woman. "Yes, but I am having difficulty," was the reply. Sue advised the spirit was telling her it was because there are several skeletons in the closet, and she should look further afield. "But they all come from Ireland," the woman replied. No matter, you need to look in England Sue advised. I hope it helped.

Last on the list was another name that had come through - there were only three names put forward by spirit during the night. "Could be a first, or a last name, Preston." I thought, this could be interesting, that's not a common name. No takers. Silence. Then a woman in the third row puts her hand up. "My surname is Prescott," she said. "No, Preston it is," Sue repeats. More silence. Sue then conversed with the spirit. "Preston? Preston? no, no, it is Prescott, yes Prescott it is," Sue announced, and then proceeded to convey a message to the Prescott in the audience

The show was then concluded by Sue's agent. It was 10.30pm.

We made our way back to the foyer, and as we did I overheard one person remark, "That's a dollar a minute", presumably a reference to Sue's 30-minute meditation CD.

Upon reaching the foyer we were nearly run down when a group of people clutching books saw Sue and followed her into the adjoining room for them to be signed.

Putting it all together

In summary, I noticed that when Sue got it wrong, she moved on quickly, that information she elicited from the person often became the information that the spirit then supplied back, often followed by the question "Do you understand that?". Typically, a name or a general description of an illness would change into something else when there was no apparent connection to a member of the audience. A vague description such as "chest pains" could be interpreted as anything from heart disease to lung cancer, leaving the field wide open for a connection. If someone identified a condition as relating to that of their dearly departed, Sue still asked them what they had died of. Once the spirit had been identified by someone from this vague description, nothing else was actually revealed to further confirm the correctness of this identification.

In one instance the spirit, confirmed by a woman in the audience to be that of her deceased mother, was identified from Sue's description of someone with a problem in the throat area. The woman revealed her mother had died from a brain tumor, but, she clarified, her mother did have difficulty swallowing in the latter part of her illness. Sue told the woman her mother had 18 variously sized brain tumors. There was no way to verify this, and interestingly the woman did not confirm it, but one has to wonder, why was the spirit not at first able to give Sue the basic information of a brain tumor, but later, after she was given this information, was then able to give a precise number to the tumors?

When anyone told Sue what gift they received during their journey to the other side, she was always able see it above them – she never told them what it was prior to her being told by the participant. Interestingly the messages Sue conveyed and the interpretation of gifts from the spirit world were generally the same – your friend/relative/partner says they love you/forgive you/never got around to telling you they love you, but they do, and it is okay to move on with your life now. There were no specific revelations from any of them, just general 'feel good' comments. Commendably, she put in a word of caution for anyone contemplating suicide – you should not hasten death, but wait until your time comes.

Was I convinced? Not at all, but I could see that most attending were, and with Sue not able to get to everyone, that many would be back another time.

At least I can point out the inconsistencies and errors that I observed to believers now that I had answered their criticism and attended a session.

Hopefully this may be sufficient to persuade some believers to think more critically about their experience in the future. I certainly hope so.

Noel Townsley is a credit controller living in Auckland. He contracted a severe bout of scepticism in the late 1970s after watching a Uri Geller broadcast on television.

report

A year of growth and fresh initiatives

Vicki Hyde presents the chair-entity's report for 2009.

THE past year since our last conference has proved a busy one for the organisation with a number of initiatives both within the society and by associates.

Al Dennard took over as Treasurer last year and we appreciate his taking up the role. We're always keen to hear from members suggestions of ways to use our funds.

One major activity was the secondary schools mailout of the *Oddzone* book. We received many heartening letters and emails from school librarians pleased to have some alternative information available to their pupils.

We have also been providing copies to interested journalists to help give them some background on the paranormal stories which come up time and time again. There will be a further drive to spread that prior to the start of the summer silly season. Contacts with journalists have continued throughout the year, covering a range of fields though concentrating on mediums as a result of many tours by psychic performers.

We're looking to support a number of possible tours in the next year. Richard Saunders of the Australian Skeptics is looking to bring his Mystery Investigators show across the Tasman. PZ Myers, of the Pharyngula science blog is willing to visit New Zealand after attending the World Atheists' Convention in Melbourne next March. Nathan Grange has been in touch to see how we can work in with James Randi's next trip to these parts, depending on how James' health pans out.

It's been pleasing to see memberships rise after remaining relatively static for a number of years. We now have around 500 members, up from 436 at the beginning of the year. The Skeptics Alert list has around 1,000 people on it.

Our Secretary, Paul Ashton, has been keeping track of memberships and introducing a number of helpful improvements in membership handling and communications. If you've used the Paypal-based credit card payment system, do please give Paul a pat on the back for the convenience.

We have had a boost as a result of the excellent work by Gold in establishing the informal Skeptics in the Pub network, now operating in Christchurch, Wellington and Auckland. This is not a formal activity by the society itself, but is worthy of support as a means of greater community outreach and promotion of critical thinking and skeptical ideas. We look forward to seeing it grow, and helping it do so. I also spoke with Brad Scott of NZ Paranormal Investigators, in a lengthy podcast that brought our message of open-mindedness, enthusiasm and humour in a critical thinking context to an entirely new audience. Our thanks go to Dave, Michelle and the other Wellington members who have pitched in to produce another excellent conference.

alternative medicine

Undercover for cancer

Loretta Marron exposes an Australian Australian alternative cancer therapist.

ON 26 February this year, trailers were run every hour throughout the day in Australia advertising the Channel Nine current affair programme ACA. It was featuring a story about a "Queensland Medical Monster" – a naturopath in Mackay who was claiming to cure cancer.

As part of her orthodox cancer treatment she had a port-a-cath surgically implanted for chemotherapy, but despite every effort from her oncologist the cancer continues to spread.

Hearing that intravenous injections of Miracle Mineral Supplements (MMS) cured cancer, she



The Jelly Bean Lady: Loretta Marron's first brush with the TV cameras came when she used jelly beans to get across the idea of the placebo effect.

As a member of the Australian Skeptics, a scientist and a breast cancer survivor, I had been recommended to ACA to be part of this story.

Every story requires a victim and that was Maria Worth. She is dying of breast cancer. paid the \$2000 for the two-week treatment.

Maria soon found herself hooked up to an IV bag attached to a wire coat hanger that was hanging from a rusty nail under a house in Mackay. Four days later, she was in the emergency ward at Toowoomba Hospital with blood clots. Horrified by what the doctors told her and by the accelerated deterioration of Maria's health, her sister contacted ACA.

After being briefed by ACA reporter Chris Allen, I phoned the naturopath, Jill Newlands. I told her I had been diagnosed with breast cancer and that I had heard about the treatment. We talked for an hour about cancer, cures and conspiracies.

After my own 2003 diagnosis with cancer, I received advice to talk to other patients who had been through the experience which had helped me at that time, so just before I hung up the phone I asked Jill if there were any patients I could talk to.

She told me about Marilyn – I knew that if I could include this patient that this would show the full story. Marilyn is a retired nurse, her breast cancer has spread and like Maria she is dying. Like Maria, Marilyn also had a port-a-cath implanted for chemotherapy. Like Maria she believed this treatment would save her life. I phoned Jill again and asked to see her the next day. She confirmed that Marilyn would be there and she agreed to the appointment. Accompanied by a member of the ACA team who had a hidden camera, I was soon heading for Jill's door.

Arriving early we were there to greet Marilyn when she arrived at the Newlands Clinic and as the morning went on we were able to film the entire procedure.

I was sickened by what I witnessed.

The next week the trailers for the show appeared throughout the day on Channel Nine and the show aired that evening.

It went well. Thanks to ACA, Jill Newlands has been exposed and has now been shut down. This has clearly been going on for some time, because after the show aired, two more patients came forward to ACA.

As for myself, I was soon at my GP's doorstep being treated for shingles on both arms.

Would I do it again? Of course I would.

Naturopaths believe in Traditional Medicine and will tell you that it has worked for hundreds of years, which is all the proof they need.

Naturopaths believe the body has the ability to heal itself but their advice continues to delay treatment for some desperate MS, Cancer and Parkinsons patients. Naturopaths believe in healing energy including ear candling, homeopathy and iridology and, positioned in pharmacies, they have ready access to major illness patients. Pharmacies should be places where we can get evidence-based medicine, so as a cancer patient, seeing ear candles and homeopathic remedies on prescription counters on one side of my pharmacy and a naturopath selling unproven cures and remedies on the other side upsets me. Knowing that the pharmacy owners know most of it is an expensive

bent spoon

placebo at best and couldn't care less, distresses me even more.

Loretta Marron is a science graduate with a business background, was Australian Skeptic of the Year for 2007, and described her experiences at the 2009 NZ Skeptics conference. She edits the website www. healthinformation.com.au

Loretta's undercover operation for ACA can be viewed on YouTube, in a clip titled Loretta Marron busts a Cancer Quack.

Scare Stories Endanger the Environment

Vicki Hyde hands out this year's Bent Spoon and Bravo Awards.

ADOCUMENTARY which highlights the "distress, cruelty, horror, ecocide, coverups and contamination" involved in 1080-based pest control has won the Bent Spoon from the NZ Skeptics for 2009.

Poisoning Paradise - Ecocide in New Zealand claims that 1080 kills large numbers of native birds, poisons soils, persists in water and interferes with human hormones. Hunters-cumdocumentary makers Clyde and Steve Graf believe that 1080 has "stuffed the venison business", and have been travelling the country showing their film since March.

The NZ Skeptics, along with other groups, are concerned that wide media coverage and nationwide screenings of *Poisoning Paradise* will lead to a political push, rather than a scientifically based one, to drop 1080 as a form of pest control, with nothing effective to replace it. United Future leader Peter Dunne appeared in the film, and described 1080 as "an indiscriminate untargeted killer". Emotions run high in the debate, with one anti-1080 campaigner going so far as to hijack a helicopter at gunpoint and last month threatening to die on Mount Tongariro unless the documentary received primetime billing.

Members of the NZ Skeptics are involved in various conservation efforts across the country. They have seen first-hand the effectiveness of 1080 drops and the brutal ineffectiveness of attempts to control pests by trapping and hunting, even in the smaller fenced arks, let alone in more rugged, isolated areas like Hawdon Valley or Kahurangi National Park.

People say that 1080 is cruel – so is a possum when it rips the heads off kokako chicks. Environmental issues aren't simple; we are forever walking a difficult balancing act. At this stage, 1080 is the best option for helping our threatened species hang on or, even better, thrive. It would be

devastating for our wildlife were we to abandon this.

I have a particular interest in this area, having served for eight years on the Possum Biocontrol Bioethics Committee, alongside representatives from Forest & Bird, the SPCA and Ngai Tahu. Over the past 20 years I have seen 1080 use become more effective with the advent of better knowledge and application methods, though I acknowledge there is always room for improvement.

We would dearly love a quick, cheap, humane, highly targeted means of getting rid of possums and other pests but until that day comes, we cannot ignore the clear and present danger to our native wildlife. To do so would be environmentally irresponsible in the extreme.

People should be cautious about taking documentaries at face value. A 2007 TV3 documentary, *Let Us Spray*, has just been cited as unbalanced, inaccurate and unfair by the Broadcasting Standards Authority.

We tend to assume that documentaries are balanced and tell us the whole story, but the increased use of advocacy journalism doesn't mean this is always the case. After all, remember that psychic charades in programmes like *Sensing Murder* are marketed as reality programmes!

The NZ Skeptics also applaud the following, with Bravo Awards, for demonstrating critical thinking over the past year:

• Rebecca Palmer, for her article *The Devil's in the Details* (Dominion Post 15 June 2009) pointing out that the makutu case

owed more to *The Exorcist* than to tikanga Maori.

Exorcism rituals, regardless of where they come from, have been shown to harm people, psychologically and physically. There are over 1,000 cases of murder, death and injury recorded on the whatstheharm.net website as a result of exorcisms reported in the Western world over the past 15 years. There are thousands more, for the most part unregarded, in places like Africa, or Papua New Guinea. These are all needless victims, often injured by people who care for them and who tragically just didn't stop to think about the nature of what they were doing.

• *Closeup* for Hannah Ockelford's piece *Filtering the Truth* (11 September 2009), regarding the dodgy sales tactics by an Australian organisation which claims that New Zealand's tap water can cause strokes, heart attacks, cancer and miscarriages. Paul Henry described the Australian promoter as a shyster using scare tactics targeting vulnerable people.

• Rob Harley and Anna McKessar for their documentary *The Worst That Could Happen (Real Crime*, TV1, 29 July 2009). They took a hard look at the increasing tendency for accusations of accessing computer porn to be made on unfounded grounds, and how it can have devastating consequences for people.

• Colin Peacock and Jeremy Rose of Mediawatch on Radio New Zealand National. Every week Colin and Jeremy cast a critical eye on New Zealand media. That's something we all should be doing in demanding that we get thoughtful, informed news and analysis from our media.

forum

Non-custodial sentence inappropriate

In delivering a non-custodial sentence in the Janet Moses makutu case, Justice Simon France noted that expert witnesses considered the perpetrators were not acting out any customary cultural or religious practice. The appropriateness of a non-custodial sentence for manslaughter has been rightly questioned. Of additional concern, however, is that a golden opportunity appears to have been missed to condemn the very idea of makutu, that someone can be possessed by an evil entity necessitating a special curselifting ceremony or exorcism.

Exorcisms, of course, are not confined to Maori culture.

Surely the time is long overdue for totally discarding all such outmoded notions of a prescientific age, and in particular makutu itself given that it can engender barbaric practices and lead to tragic consequences. Justice France has been reported as even expressing the view "Makutu did not kill her. She drowned", seemingly completely overlooking the fact that it was an insane belief in makutu that generated all that followed.

Warwick Don Dunedin

How the NZ Skeptics in the Pub got started

Gold gives the inside story of the beginnings of Skeptics in the Pub meetings in New Zealand.

TFIRST heard about Skeptics in the Pub on the Skeptics Guide to the Universe podcast (**skeptics-guide.com**). It started in London, spread to Boston and continued to spread from there. It originally started as a lecture series and currently, world-wide, there are 38 listed at the UK site that started it all. There are a few that I know of that aren't listed there and New Zealand (**skepticsinthepub.net.nz**) is about to add to the growing list also.

Skeptics in the Pub is, primarily, an informal social gathering of like-minded, rational thinking individuals. The 'Pub' aspect of the group is not a requirement. We can just as easily be Skeptics in the Park, at the Pictures, at the Beach...

Skeptics in the Pub can be what you want it to be: an opportunity to socialise in the Big Blue Room (Outside); a place to organise real world events; or an online location to chat and discuss the Woo that is out there, particularly in our own country.

In the future the website will also include:

• A resource index to make it easier for you to locate the evidence to counter claims made by the vocal lunatic fringe

• A directory of businesses that deal in Woo, in the hope that when people search for them we're found and can provide links to the evidence that explains or proves the Woo is, well... Woo. We have complete control over the website. So if people have suggestions for what we can do with it, please use the forums to discuss them.

Another thing I want Skeptics in the Pub to be is a legal buffer for NZ Skeptics Inc. The society is a legal entity; as such it can be targeted by lawsuits. For this reason they have to be careful about what they say. Skeptics in the Pub can provide an extra layer of separation for those that want to speak out and should things go wrong we can be a very vocal support system, providing research, funding and moral support.

I see the Skeptics in the Pub website as a platform where people can publish their informed opinion on topics that others seem to think are controversial. The idea behind this is to provide a certain amount of legal protection to others. While this site allows the publishing of these articles the content, opinions and copyright are retained by the author. We make a point of separating any one person's opinion from all others so that should any legal action be taken the entire group can not be targeted and potentially taken down. Should this sort of thing happen the site would then provide a location for the concerted defence and support of the individual being targeted.

I would also like to see Skeptics in the Pub used as a rally point. A location where those that are willing to start things can plan, prepare, recruit and execute their ideas from.

I had used meetup.com to organise events before. So, when I checked the site and found about ten others interested in Christchurch I paid the money, announced the list to various sources and waited a month. We got about 25 to the first gathering and positive things were being said. Christchurch is currently holding fortnightly gatherings on alternating Mondays and Tuesdays so anyone that can't make one may be able to make the other. We're also holding a monthly video night which, to date, has had a decidedly atheist theme.

Auckland was next to start; Mike Kilpatrick stepped up to manage that. We were fortunate to have Kylie Sturgess from the Skeptic Zone podcast passing through Auckland on the same night, and were honoured to have her as the guest speaker. She recorded a Think Tank, which is a segment of the podcast.

The first of the Wellington gatherings was on the Thursday before the conference. They are being run by Tom Neal, who has been running a small, regular gathering of 'Pharyngulites'- readers of PZ Myers' blog (scienceblogs.com/pharyngula). When the opportunity arose he was happy to merge the two. We managed about 15 on the first night and the last of us left at about midnight. The second gathering was the post-conference meetup which was posted very late (sorry guys). We managed to get 15-20 though. There was a lot of interest from this group in joining the Skeptics in the Pub so Wellington numbers should grow fairly quickly initially. NZ Skeptics Inc, at the AGM this year, totally overwhelmed me with an extremely generous donation of \$1000 to continue and expand on the meetups that are being run from Meetup.com. So, things can only get better from here. If you live in an area where you know a few skeptics and would like to meet more, get in touch and I'll set up a meetup group for your area. I'm not looking at running the groups myself. I'm just providing the online tools for getting things started.

bioblog

The vertical limit for randomised trials

Alison Campbell considers the evidence for the efficacy of parachutes.



RECENTLY a teacher sent me a paper titled: 'Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials' (Smith and Pell, 2003, BMJ 327: 1459-1460). I have to say I chuckled when I read this - a common charge levelled against current medical practice by the alternative health lobby is that many medical techniques haven't been subjected to randomised controlled trials (with the corollary that it's thus unfair to demand evidence from such trials on alternative practices).

The authors state they conducted a literature search of some of the major science sources, using the search words 'parachute' and 'trial'. However (and unsurprisingly), they found no randomised controlled trials (RCTs) of parachute use. Smith and Pell begin their discussion with the following inspired statement: "It is a truth universally acknowledged that a medical intervention justified by observational data must be in want of verification through a randomised controlled trial."

Many medical interventions probably fall into this category - for example, I doubt that surgery for severe appendicitis has ever been subjected to such a trial. That's not to say that, where appropriate (and in the case of appendicitis it almost certainly isn't!) such trials shouldn't be performed. As Smith and Pell point out, hormone therapy for post-menopausal women seemed - on the basis of observational studies - to convey a number of health benefits. But RCTs showed that hormone replacement therapy actually increased the risk of ischaemic heart disease.

As the authors say, RCTs avoid a major weakness of observational studies: that of bias (eg selection bias and reporting bias). They note that individuals jumping from aircraft without the help of a parachute are likely to have a high prevalence of preexisting psychiatric morbidity (ie they are probably not in their right minds when they jump. You have got to love this paper!). So any study of parachute use could well be subject to selection bias, in that those using them are likely to have fewer psychiatric problems than those who don't. Smith and Pell also put forward the possibility that enforced parachute use is simply a case of mass medicalisation of the population by out-of-control doctors - or worse, by evil multinational corporations. (These are, of course, charges frequently levelled at the medical world, eg by those who are against interventions such as vaccination.)

This little gem of a paper contains some valuable lessons on the nature of science (and more particularly, science-based medicine). And it should be read by anyone who doubts that scientists have both creativity and a good sense of humour.

Alison Campbell is a biology lecturer at Waikato University.

If undelivered, return to:

NZ Skeptics PO Box **29-492** Christchurch 8540 New Zealand Permit No. 3357

NZ Skeptics – Now on Facebook!

Facebook provides another way for New Zealand's skeptics to keep in touch, find out about skeptic-related events, and exchange opinions and information.

The NZ Skeptics Facebook page is open to all, and provides a mix of official society information and user-generated content, including images and video.

Visit www.facebook.com/group.php?gid=111540397760 or follow the link from the NZ Skeptics website.

NZ Skeptics (Inc.)

Chair-entity:	Vicki Hyde (Christchurch), chair@skeptics.org.nz		
Secretary:	Paul Ashton (Christchurch), secretary@skeptics.org.nz		
Treasurer:	Al Dennard (Putaruru), treasurer@skeptics.org.nz		
Committee:	Claire le Couteur (Christchurch)	Julian Kissock (Palmerston North)	
	Robert Woolf (Auckland)	Joanna Wojnar (Wellington)	
	Warwick Don (Dunedin)	Annette Taylor (Hamilton)	
	Keith Garratt (Rotorua)	Nathan Grange (Auckland)	
	Felicity Goodyear-Smith (Auckland)	Michelle Coffey (Lower Hutt)	
	Denis Dutton (Christchurch)	Paul Trotman (Dunedin)	
	Gold (Christchurch)	Don Kinnell (Wairarapa)	
Media Contact: Vicki Hyde			
NZ Skeptic Editor: David Riddell, number8@ihug.co.nz			

Video Librarian: Alastair Brickell www.skeptics.org.nz/SK:MEMBERSVIDEO