RESPONSE TO JUDY WILYMAN'S PHD THESIS ON VACCINATION POLICY - AN ASSESSMENT OF ERRORS, OMISSIONS, MISREPRESENTATIONS[1]

INTRODUCTION

In 2015 noted anti-vaccination campaigner Judy Wilyman submitted a doctoral thesis to the University of Wollongong. Called "A critical analysis of the Australian government's rationale for its vaccination policy", Wilyman's thesis described what she calls "the political framework in which policy is affected by biased science or undone [underfunded] science" and claims "the existence of institutional barriers to carrying out independent research, including on topics unwelcome to groups with vested interests".
She included collusion between industry and health authorities, particularly that the World Health Organisation "is perceived to be out of touch with global communities and it is controlled by the interests of corporations and the World Bank".
The thesis was prepared under the supervision of Prof Brian Martin, within the School of Humanities and Social Inquiry, Faculty of Law, Humanities and the Arts (ie not a medical science discipline).
Two unnamed reviewers of the thesis were appointed. One approved it, and one rejected it outright. A third reviewer was found who offered a positive review, despite some initial issues which were apparently addressed. The University accepted her thesis and awarded her a PhD.
The thesis, and the approval process, raised an instant and negative response from a wide range of sources – see a selection of those responses at the end of this document. The University's response to that criticism was that Wilyman's research was conducted and examined under high standards, and it spoke in defence of academic freedom. (for a review of the process and Wilyman's use of her PhD qualification, see The Skeptic magazine, December 2020.)

The following document is a list of errors, omissions and misrepresentations found in Wilyman's PhD thesis. It was compiled based on input from a number of experts in the field on immunology and relevant government policy.
We have listed each comment according to the following elements:

1. Basic theme (our wording)
2. Relevant place in the thesis being discussed (entries ae listed in order they appear in the thesis)
3. Quote from the thesis
4. Comment

All references in this list to research papers and articles relate to what was available at the time of the submission of the thesis, its evaluation and the 'Review' of the process undertaken by the University of Wollongong. This is not meant to be an exercise made in hindsight but to be an exercise in comparing the thesis and the 'Review' to the knowledge available at that time. Words in the present tense refer to the time of the submission, examination, and 'review' of the thesis.
Note that this is a work in progress. It is an indication of the range and nature of the errors, omissions, and misrepresentations, and should not be seen as definitive. That may come.

[1] At http://ro.uow.edu.au/theses/4541/

We welcome comments and corrections, as are suggestions for expanding this document with more examples. Such items should be sent to Tim Mendham, editor@skeptics.com.au.
Copies of Wilyman's 400-page thesis can be accessed at http://ro.uow.edu.au/theses/4541.
It is important to note that the title of her thesis is "A critical analysis of the Australian government's rationale for its vaccination policy". Wilyman did not do that. She did not look at the bureaucratic process and try to understand the hoops that vaccines makers have to jump through to sell their product. She failed to consider the process by which a novel vaccine is selected for inclusion into the schedule in Australia. She should have examined the literature for and against Australian vaccination policy in both broad terms, and with a specific examination in relation to HPV, and develop a conclusion as to whether Australian government policy is sufficiently evidence based.
The following is an appraisal of what Wilyman has written, and what has been approved and defended by the University of Wollongong.

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PUBLICATIONS IN SUPPORT

Page xiii, *Publications in support of this thesis:*

Wilyman cites the following two items as "*Publications in Peer-Reviewed Journals".*

- 'Wilyman J. 2013. "HPV Vaccination programs have not been shown to be cost-effective in countries with comprehensive Pap screening and surgery", *Infectious Agents and Cancer*. 8:21 (June): pp1-8.
- 'Tomljenovic L, Wilyman J, Vanamee E, Bark T, Shaw C. 2013. "HPV Vaccines and Cancer Prevention: Science versus Activism", *Infectious Agents and Cancer*. 8: 6 (Feb): pp1-3.'

The only two "Publications in Peer-Reviewed Journals" that support her thesis were her own publications with known antivaccine cranks. Surely that should necessitate a reality check in any rational person?

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OTHER PUBLICATIONS IN SUPPORT

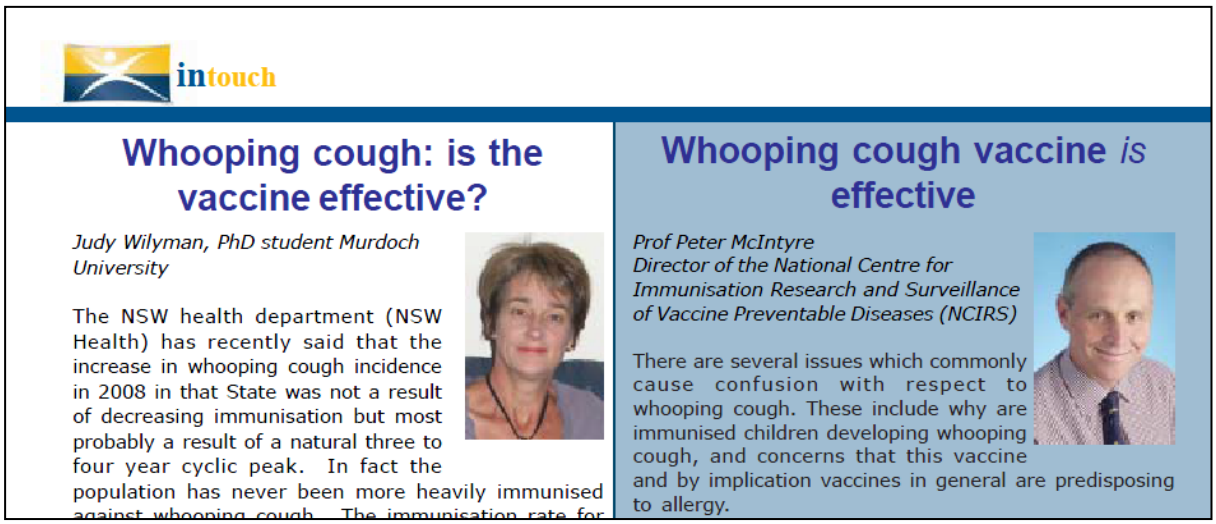
Page xiii, *Other publications in support of this thesis:*

Wilyman cites the following items as "Other publications in support":

1. Wilyman J. 2011. "Questioning the Evidence for HPV Vaccine", ABC online Health Report, October 13., http://www.abc.net.au/science/articles/2011/10/13/3337950.htm
2. Wilyman J. 2011. "The Ethics of Childhood Influenza Immunisation", *Medical Veritas*. 7: 2 (Jan), http://www.medicalveritas.org/MedicalVeritas/The_Ethics_of_Childhood_Influenza_Immunization.html
3. Wilyman J. 2011. "The pathogenesis of Human Papillomavirus (HPV) in the development of cervical cancer: are HPV vaccines a safe and effective management strategy?", *British Society of Ecological Medicine (BSEM), Conference Proceedings*, published online September 2011.

4. *Wilyman J. 2009. A new strain of influenza or a change in surveillance? Australasian College of Environmental and Nutritional Medicine (ACNEM). 28: 4 (Dec): pp6-7.*
5. Wilyman J. 2009. "Whooping cough: is the vaccine effective?", *Intouch Newsletter* (April), Public Health Association of Australia (PHAA).
6. Wilyman J. 2008. "Coercive and Mandatory Immunisation", Australasian College of Environmental and Nutritional Medicine (ACNEM). 27: 2 (Oct): pp.6-9.

Notes re references (numbers refer to the list above):
Ref 1. Wilyman misrepresents the ABC Science Radio article above. For a start, it was not written by her, but by Anna Salleh, a science journalist at ABC Science. It is not a "publication" but rather a short news report. It also does not "support this thesis" at all. In fact, the report does not include any support for her thesis and criticises it extensively, with quotes from Professor Peter McIntyre, director of the National Centre for Immunisation Research and Surveillance, and Professor Karen Canfell of the Cancer Council of NSW.
Ref 2. Re the publication in *Medical Veritas*, Rational Wiki reports[2] that "*Medical Veritas* was an extremely sleazy anti-vaccine journal". Its editorial board included none other than Andrew Wakefield, the doctor who was deregistered in the UK because of his fraudulent 'research', while his research paper was retracted by *The Lancet*. *Medical Veritasis's* articles claim that all vaccines are dangerous, and there is a conspiracy to push them on the public because of the vast profits. *Medical Veritas* cites the regularly misapplied 'Nuremburg Code' to claim that vaccines are "The New Crimes Against Humanity". It claims that the Zika virus was a result of "an experiment conducted in Brazil in 2014 using genetically-modified (GM) mosquitoes".[3] No rational person who has any concern for their reputation would cite Medical Veritas.
Ref 5. Her article does appear there, but fails to mention that immediately adjacent to her article, there appears an article 'Whooping cough vaccine is effective' by Prof Peter McIntyre Director of the National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS). (The italic emphasis is his). Prof McIntyre's article contradicts Wilyman's entirely and demonstrates that she does not know what she is talking about. Her failure to disclose this important publication is telling, revealing her bias and mendacity.



intouch

Whooping cough: is the vaccine effective?

Judy Wilyman, PhD student Murdoch University

The NSW health department (NSW Health) has recently said that the increase in whooping cough incidence in 2008 in that State was not a result of decreasing immunisation but most probably a result of a natural three to four year cyclic peak. In fact the population has never been more heavily immunised against whooping cough. The immunisation rate for

Whooping cough vaccine *is* effective

Prof Peter McIntyre
Director of the National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS)

There are several issues which commonly cause confusion with respect to whooping cough. These include why are immunised children developing whooping cough, and concerns that this vaccine and by implication vaccines in general are predisposing to allergy.

[2] https://rationalwiki.org/wiki/Medical_Veritas
[3] http://medicalveritas.org/zika-virus-mystery-solved/

As for claiming that the Intouch Newsletter published by the Public Health Association of Australia (PHAA) supports her thesis, that is just wrong. The 'publication' was a letter from Wilyman, not an indication that the PHAA supported her.

Of the six "other publications" that "support this thesis", all of them were published by Wilyman: her letter to a newsletter, publications in the low-credibility alternative medicine site of the Australasian College of Environmental and Nutritional Medicine, her 'papers' published by the no-credibility crank organisation *Medical Veritas* and one citation of one publication by known anti-vaccine cranks led by Tomljenovic[4] and her. And the ABC Science radio article that directly contradicts her.

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CLINICAL TRIALS OF THE SMALLPOX VACCINE

Page 15, section 2.3 The Control of Infectious Diseases:

"Vaccination as a preventative public health strategy was first used by Edward Jenner in the late 18th century. It was used in the fight against smallpox for ~150 years but its efficacy was never tested in controlled clinical trials that exposed a large number of participants to the smallpox virus and compared the outcome to a control group. Consequently there is controversy surrounding the use of smallpox vaccine in the control of smallpox epidemics throughout the history of its use."
A clinical trial of a smallpox vaccine would not involve exposing participants to the smallpox virus, because smallpox had a mortality rate of 20-30%! Ebola is a similarly lethal virus, and the Ebola vaccine was tested by vaccinating people who'd been exposed to Ebola, and comparing the ones who were vaccinated immediately with the ones who were vaccinated a few weeks later. https://www.nature.com/news/successful-ebola-vaccine-provides-100-protection-in-trial-1.18107
Also, the anti-vaccinationists of the time were motivated "less by concern about the risks of the procedure than on moral and philosophical objections to compulsory vaccination", according to the book "Smallpox and its Eradication", which is available on the WHO website.
Her misrepresentations tend to make anti-vaxers look good.

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DEATH RATES DECLINE BEFORE VACCINES

Page 18, section 2.4 Developments in Public Health Policy in Australia:

"When the death rate from scarlet fever, diphtheria, whooping cough and measles in Britain from 1860–1965 for children up to 15 is combined, the majority of the decline (90%) had occurred before the introduction of medical interventions. This includes the use of antibiotics and widespread vaccination against diphtheria."

This may be true. But infectious diseases were still causing many more deaths before the introduction of medical interventions than they are now!

[4] Tomljenovic now features extensively in Retraction Watch.

In the USA from 1900-1940, mortality from infectious diseases declined mostly due to public health measures such as sewage disposal, chlorination of drinking water, food safety, and animal and pest control.
However, in 1940, the death rate from infectious diseases, before the widespread use of antibiotics and vaccines, was about 5 times what it was in 1980. See http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4829a1.htm
And what about all the people who got sick from vaccine-preventable diseases but didn't die? Not only do these diseases make people sick, but they can cause damage that lasts a lifetime, such as hearing loss from measles. And what about the cost of medical treatment when unvaccinated people get sick, tracking down people who've been exposed and quarantining them? The death rate from infectious diseases decreased before the vaccine, but the incidence of many did not. See http://graphics.wsj.com/infectious-diseases-and-vaccines/
For example, measles is very contagious, airborne, and wasn't controlled by public health measures. It was reduced to a very low level by the vaccine.
Medical care was better so fewer people were dying from these diseases. But they were still getting sick from them.
Would the extra deaths, sickness, permanent disability and cost that would result from not using vaccines be acceptable? Only if the anti-vaxers are right that the adverse reactions to vaccines are hugely underestimated somehow.

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INFECTION RATES DECLINE BEFORE VACCINES

Page 19, section 2.4 Developments in Public Health Policy in Australia:

"This experience of the decline of infectious diseases was similar in Australia [ie a similar pattern to tuberculosis in the UK with the vast majority of the decline occurring prior to the introduction of medical interventions]".

Here she repeatedly misleads about the introduction and widespread use of vaccines in Australia. For example, the last sentence of the paragraph is "The rates of infectious diseases in Australia were very low from 1945 to 2000; 80% of the fall in the under 5 mortality rates had occurred by 1960, prior to the introduction and widespread use of vaccines" but diphtheria and pertussis vaccines were widespread in the 1940s. See Hall R. *Notifiable Disease Surveillance, 1917 to 1991*: "In the early 1930s [immunisation against Diphtheria] was incorporated into school immunisation but widespread use occurred only from the 1940s. Diphtheria-tetanus-pertussis combined vaccine was introduced in 1953" [p227]. "Mass immunisation with pertussis vaccine did not start until the 1940s" [p228].

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MIASMA THEORIES

Page 23, section 2.5 Immunological Theories:

"Prior to improved scientific knowledge about microorganisms the etiology of infectious diseases was believed to be from a 'miasma' created by unsanitary conditions: conditions external to the individual (Reynolds 2004 p168; Curry 2002 p32). Treatments were based on the zymotic theory of contagion that held that it generated spontaneously from decaying matter (Curry 2002). Miasma theory contended that disease resulted from inhaling bad smells

and for political reasons it was portrayed to the public as being 'unscientific'. This theory advocated improved environmental conditions to reduce infectious diseases whilst the germ theory or contagion theory held that microscopic organisms were responsible for the development of disease. Germ theory lent itself to the use of vaccines as a medical intervention for the prevention of disease and this was a politically desirable outcome for the medical/industry model of health that arose in the late nineteenth century (Pelling 2002 p26). In the early twentieth century sanitary reform driven by the 'miasma' theory was replaced with microbiology and termed 'sanitary science' instead of 'filth diseases'. This was sanitary propaganda which relied on a simplification of the causation of disease (Pelling 2002 p30). A change in terminology was necessary to gain popular support for the germ theory over social reform in the prevention of infectious diseases."

This section discusses the theories of human immunology that developed in the 20th century to illustrate the rival theories that fought for dominance in public health policy. Political dominance determined the theories that were adopted in public policy.
What Wilyman writes is almost entirely wrong. The best Wilyman can do is to be partly correct in small snippets. Yes, 'the miasma' was an attributed disease-causing entity identified by foul smells and associated with decay; no, miasma was not at all a 'theory' in the way scientists and social scientists use the term. According to Wilyman, germ theory prevailed because of its utility in propaganda (her word) - implying that evidence from microbiology epidemiology was not the reason. The offending section should be read in full; it can be summarised as overwhelmingly wrong, hopelessly confused, and misdirecting.
The section is so badly written that it is painful. "Miasma theory contended that disease resulted from inhaling bad smells and for political reasons it was portrayed to the public as being 'unscientific'." When was it portrayed as unscientific and by whom? Not said. Presumably as soon as it was disproved by actual science long ago, but Wilyman does not say that. She alleges that it was political without any evidence. Considering that the main theme of the thesis is the serious allegation of political involvement in vaccination policies, Wilyman was obliged to provide serious evidence but failed to do so.

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NATURAL IMMUNITY

Page 28, section 2.5 Immunological Theories:

"Immunity occurs naturally in humans, and without risk, if the exposure occurs at the right time during childhood."

Not when it comes to tetanus, for example. The WHO reports 72,600 estimated deaths in <5 years (in 2011).[5] She provides no evidence that natural immunity comes without risk, and should have done so considering the many hundreds of thousands of infant deaths that occur when vaccination is absent.

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[5] http://www.who.int/immunization/monitoring_surveillance/burden/vpd/surveillance_type/passive/tetanus/en/

GERM THEORY

Page 29, section 2.5 Immunological Theories:

"*The germ theory in the SMM* [6]*, as applied to the etiology of infectious diseases, has been subject to critical analysis by many, including Bashford and Hooker (2002) and Pelling (2002).*"

But not by anyone with a modicum of scientific knowledge. Not only that, but her assertion is not reflected in the reference. The book discusses historical ideas about disease only, going back centuries, and does not bring any critical analysis to the modern concept of infectious disease. Further she seems to be disputing the very concept of 'germ theory' as if it is only a myth.

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EVIDENCE-BASED MEDICINE

Page 57, 3.4 National Immunisation and Technical Advisory Groups (NITAG):

"*EBPM [evidence-based policymaking] is a move away from the use of common-sense and local knowledge in the formation of policy.*"

Is she really suggesting that evidence is a bad thing? Evidence-based medicine and policy are clearly and obviously superior to the 'common-sense' that we used in the past, such as putting onions in your socks to cure the 'flu.[7]

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HERD IMMUNITY

Page 103, section 4.7 Herd Immunity:

"Herd immunity is known to be created by natural exposure to the infectious agent and it is theorised that vaccines can also create herd immunity."

The first part of this statement is rubbish; tetanus infections are not contagious and therefore cannot create a 'herd immunity'.

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SMALLPOX

Page 105, section 4.7 Herd Immunity:

"It is debatable whether the vaccine would have been necessary because smallpox is only transferrable by direct skin-to-skin contact. It is not transmissible through the environment or until the symptoms appear. Therefore, isolation of the cases alone could have stopped the

[6] We could not find a relevant meaning of the acronym 'SMM' in the online 'Free Dictionary – Acronyms'. Wilyman explains in her 'Abbreviations' page that it means 'Scientific Medical Model'. Evidently Wilyman has invented her own acronym.
[7] https://www.healthline.com/health/cold-flu/onion-in-sock#evidence

circulation of the virus and eradicated this disease. This is particularly that case because of the improved environmental conditions due to public health reforms in the twentieth century. A vaccine for smallpox was in use for 150 years before the disease was finally eradicated by the isolation of cases in the mid-twentieth century."

This is demonstrably and egregiously false.
The CDC says that "Generally, direct and fairly prolonged face-to-face contact is required to spread smallpox from one person to another. Smallpox also can be spread through direct contact with infected bodily fluids or contaminated objects such as bedding or clothing. Rarely, smallpox has been spread by virus carried in the air in enclosed settings such as buildings, buses, and trains. ... A person with smallpox is sometimes contagious with onset of fever (prodrome phase), but the person becomes most contagious with the onset of rash."
The symptoms of the prodrome phase of smallpox are similar to the flu: "The first symptoms of smallpox include fever, malaise, head and body aches, and sometimes vomiting. The fever is usually high, in the range of 101 to 104 degrees Fahrenheit. At this time, people are usually too sick to carry on their normal activities. This is called the prodrome phase and may last for 2 to 4 days." http://www.bt.cdc.gov/.../smal.../overview/disease-facts.asp
Of course, people tried to control smallpox by isolation before variolation/vaccination became available. But that wasn't effective.
Someone with smallpox might not be isolated before they transmitted the disease to anyone else. It would not necessarily be clear they had smallpox. The virus might be transferred on their bedding. Many indigenous Americans were killed by smallpox spread to them via contaminated blankets. And, someone had to take care of the sick person.
Mortality from smallpox was already greatly reduced by the vaccine, when it was finally eradicated by tracking down individuals who had been exposed and vaccinating them. See the book *Smallpox and its eradication*, which is available on the WHO website.
Also, it would be unethical to not vaccinate a person who had been exposed to smallpox and rely on isolating them instead! "Approximately one-third of people with smallpox died of the disease. Survivors were scarred for life. If the eye was infected, blindness often resulted." http://www.medicinenet.com/smallpox/article.htm

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REPORTING OF RISKS

Page 111, section 4.10 Communicating risk to the public:

"The risks of vaccines are rarely reported on and when they are, they are downplayed and stated to be 'very rare'."

She provides no evidence for this most serious allegation, no citation, nothing. Evidently she is unaware of the "Consumer Medicine Information" (CMI) leaflet written for consumers, and included in the vaccine package. It took me two seconds on Google to find the CMI for the MMR Vaccine and there's the list of 'side effects' at
http://www.csl.com.au/docs/897/204/MMR%20CMI%20Nov%202016.pdf

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LABELLING AS "ANTI-VAX"

Page 112, section 4.10 Communicating risk to the public:

"Another way to influence behaviour is through labeling. [sic]. *In the vaccination debate the terms 'anti-vax' and 'conspiracy theory' are used to suggest that the ideas are not mainstream attitudes.:*

Conspiracy theories are labelled "conspiracy theories" if that's what they are.

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SCIENCE GAPS

Page 116, section 4.11 Conclusion:

"The dominance of scientific experts in vaccination policy is questionable because of the increasing gaps in scientific knowledge due to undone science."

This makes no rational sense. Due to Wilyman's perception that there are gaps in knowledge (yes there are) she says that there is no role for experts in vaccination policy making. Is she arguing that policies should be determined by crystal-ball gazers? And what does she mean by "increasing gaps in scientific knowledge"? Is she saying that with every paper published the sum of human knowledge goes backward?

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SCIENCE VS THE SOUL

Page 121, section 5.3 The Scientific Medical Model of Health:

"*Allopathy rejects the theory that the mind, the emotions and the soul are involved as causal agents in the development of illness or its treatment (Walker 1993 p3; Doyal and Doyal p85) and this places it in conflict with models in eastern countries which are founded on a holistic approach to health."*

Rational people prefer to use an evidence based system, and if vaccination policies, (remember the thesis is supposed to be about vaccination policies) should take into account emotions and the soul, she should provide evidence that they should.
Note that "allopathy" was a term coined in 1810 by the inventor of homeopathy, Samuel Hahnemann. It was originally used by 19th-century homeopaths as a derogatory term for "heroic medicine", the traditional European medicine of the time (and a precursor to modern medicine) that did not rely on evidence of effectiveness. The term is generally used today in a pejorative sense by supporters of complementary and alternative medicine.

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BIOLOGY

Page 121, section 5.3 The Scientific Medical Model of Health:

"In the scientific model it is assumed that the etiology of disease is mainly biological."

Because it is? Again, she is rejecting evidence and science in favour of quackery.

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CONTAGION

Page 122, section 5.3 The Scientific Medical Model of Health:

"If an agent, such as influenza virus, is known to cause an illness it would be expected that all individuals exposed to the agent would get the illness. But this is not the case."

It is not the case, and nor would it be expected to be so. In her attempt to discredit germ theory she has set up a falsehood and then shot it down.

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ASYMPTOMATIC

Page 122-3, section 5.3 The Scientific Medical Model of Health:

"In the scientific medical model an individual can be diagnosed with a disease without experiencing any symptoms and this is why health can be viewed as a socially constructed entity."

When a disease is asymptomatic, it's still considered a disease because it's likely to result in adverse symptoms in the future. Or someone might have an asymptomatic infection, but they're still capable of transmitting the infection to others who would have symptoms.
So the concept of asymptomatic illness is natural, given our knowledge of disease - not an arbitrary cultural construction, as "socially constructed" implies.

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PLACEBOS

Page 171: section 7.3 The Government's Answers to FAQ on the IAP Website:

"Formal controlled clinical trials using an inert placebo to demonstrate efficacy in preventing disease have never been performed for most conventional vaccines to conclusively support the claim that 'the benefits of immunity gained from vaccines far outweighs the very small risks of immunisation (vaccination)'."

That is demonstrably wrong. The WHO document "Expert Consultation on the Use of Placebos in Vaccine Trials" says: "A common model for the evaluation and deployment of a new vaccine, against a disease for which there is no existing vaccine, is that it is first tested in a placebo-controlled trial" and "Before they are introduced into widespread use, the safety

and efficacy of vaccines are generally assessed in individually randomized controlled trials, which are considered the gold standard for such evaluations." The document then goes on to describe two placebo-controlled HIV vaccine trials in Thailand.
Further, a 2014 paper in *Vaccine* titled "Placebo use in vaccine trials: Recommendations of a WHO expert panel" by Annette Rid, Abha Saxena et al, the authors say "Randomised, placebo-controlled trials are widely considered the gold standard for evaluating the safety and efficacy of a new vaccine."
Even further, go to the paper published in *The Lancet* in April 1986, 'Frequency of true adverse reactions to measles-mumps-rubella vaccine. A double-blind placebo-controlled trial in twins.' The Abstract begins "The vast majority of adverse reactions following immunisation of children with live measles-mumps-rubella (MMR) vaccine were shown in a double-blind, placebo-controlled, cross-over study in 581 twin pairs to be only temporally but not causally related to the vaccination." [8]

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AUTISM AND HEP B VACCINE

Page 178, section 7.3 The Government's Answers to FAQ on the IAP Website:

"*A study to investigate the health effects of using Hepatitis B vaccine in neonates (infants under 4 weeks of age) was carried out in 2010 on children born before 1999. This was before thimerosal-free vaccines were available. The study reported that male neonates had a 3-fold increased risk for autism diagnosis than males never vaccinated or vaccinated after the first month of life. Non-white boys bore a greater risk than white neonates (Gallagher and Goodman 2010 p1671)."*

This has been widely debunked. Researchers examined data from the National Health Interview Studies, and looked at autism and hepatitis B vaccination, using surveys from 1997 to 2002, with children aged from 3 to 17. The autism group had 33 children in total. Of these, 9 of 31 (29%) were given the HepB vaccine. Compare this to 1258 of 7455 (17%) of the non-autism group who were given the HepB.
When were the 17-year-olds born? 1980. When was the Hepatitis B vaccine introduced? 1991. When was the HepB vaccine fully implemented? 1996.
So many of the children were born before the 'epidemic' of autism. Yes, the number of people identified with autism has gone up significantly in the last 30 years, but almost anything that changed in that time would 'correlate' with more autism; mobile phones, computer games, Subway hotdogs, wearing baseball caps backwards.

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MORE ILLNESSES

Page 179, section 7.3 The Government's Answers to FAQ on the IAP Website:

"The chronic illnesses that have increased in the Australian population as the use of vaccines has increased include autism, asthma, allergies, anaphylaxis, neurological damage (learning

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[8] Frequency of true adverse reactions to measles-mumps-rubella vaccine. A double-blind placebo-controlled trial in twins. Clinical Trial Peltola H, et al. Lancet. 1986.. LancPeltola H, Heinonen OPet. 1986 Apr 26;1

and behavioural difficulties), speech delay and autoimmune diseases, eg arthritis and type 1 diabetes mellitus.".

You could make the same observation about TV ownership rates, global warming, iPhone sales, or the standard of living - they've all gone up. To draw a link between the two is forgetting that correlation is not causation.

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ALLERGIES

Page 188, section 7.4 A Discussion of the Australian Academy of Science Document 'The Science of Immunisation':

"One class of antibody produced is immunoglobulin E which plays a major role in allergic diseases; asthma, hay fever, dermatitis, gastroenteritis and anaphylaxis ... have increased 5-fold in Australian children over the last decade" [citing ASCIA 2015].

The link at Wilyman's text "5-fold increase in chronic illness" goes to a website of the charity Allergy & Anaphylaxis Australia (A&AA).[9] The article there 'First National Allergy Strategy released' does not refer to a '5-fold increase in chronic illness' as Wilyman claims. The article concentrates on all allergies, including to insect stings, pollen, food and drugs, etc. The only reference to *'5-fold'* is to *'Hospital admissions for anaphylaxis (life-threatening allergic reactions) have increased 5-fold in the last 20 years.'*

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DNA AS ANTIGEN

Page 188, section 7.4 A Discussion of the Australian Academy of Science Document 'The Science of Immunisation':

"These vaccines use acellular components, chemical synthesis or recombinant DNA as the antigen."

At time of writing, the author of this response said that "None that I know of use DNA as an antigen". We welcome any comments and corrections.

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NO RISK?

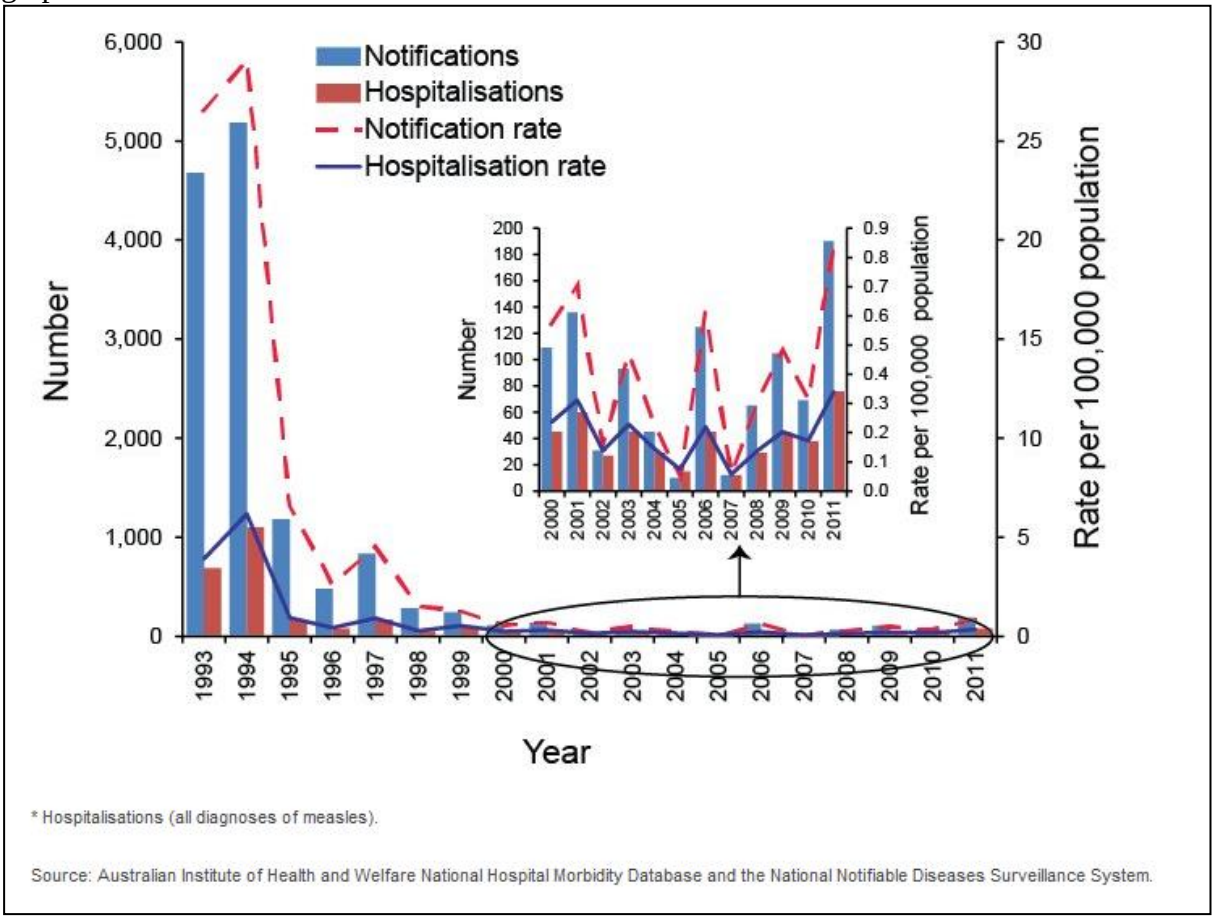
Page 191, section *7.6 The Evidence not Provided by the Government and AAS:*

"*The diseases for which vaccines are recommended have not been demonstrated to be a serious risk to the majority of children in Australia."*

Could this be because most of them are vaccinated? For the unvaccinated, they have been shown to present a serious risk.
A live attenuated measles vaccine was first licensed in 1968 in Australia. Although the

[9] https://www.allergy.org.au/about-ascia/info-updates/aug-7-2015-first-national-allergy-strategy-released

vaccine was introduced in all states and territories of Australia by 1972, it was not included in the first national childhood vaccination schedule at 12 months of age until 8 years later. A second dose was introduced for those aged 10–16 years at the end of 1993, following a large measles epidemic that resulted in approximately 10,000 cases and 4 deaths.[10] By 1995, measles incidence and hospitalisations had decreased substantially as shown in the following graph.



Or look at the number of deaths world-wide from measles. As the WHO says, "Measles is one of the leading causes of death among young children even though a safe and cost-effective vaccine is available. In 2016, there were 89,780 measles deaths globally – marking the first-year measles deaths have fallen below 100 000 per year. Measles vaccination resulted in a 84% drop in measles deaths between 2000 and 2016 worldwide." [11]

So Wilyman's claim that "The diseases for which vaccines are recommended have not been demonstrated to be a serious risk to the majority of children in Australia" is just plain wrong, as is her assertion that vaccination is not necessary. It is vaccination that is keeping Australian children safe.

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[10] http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdi3901a.htm

[11] http://www.who.int/mediacentre/factsheets/fs286/en/ (since updated by WHO December 2019)

VAXED VS UNVAXED

Page 192, section 7.6 The Evidence not Provided by the Government and AAS:

"There is no definitive evidence from formal controlled clinical trials comparing vaccinated participants to unvaccinated participants and demonstrating the efficacy of each vaccine against the infectious disease they are designed to prevent."

That is demonstrably untrue. There are many such studies. A quick (0.46 seconds) Google search turned up seven original research papers and one meta-analysis (looking at another 6 randomised clinical trials or RCTs) published since 2009 which look at myriad aspects of general health, comparing large unvaccinated and vaccinated populations. They included tens of thousands of participants and found that vaccinated people are healthier than unvaccinated, (and the rate of autism is no different).

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WORLD HEALTH ORGANISATION & WORLD BANK

Page 207, section 8.6 Implications of the Corby Case for Public Health Policy:

"W*HO is perceived to be out of touch with global communities and it is controlled by the interests of corporations and the World Bank.*"

She provides no substantiation for this blatant conspiracist allegation.

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HUMAN PAPILLOMA and SWINE FLU

Pages 217-293, Chapters 9 and 10:

Wilyman does get specific with the two case studies at the end of her thesis - the HPV vaccine and the swine flu vaccine. So she did understand the need to support her claims with specific facts.
But has she actually done so?
Her claim, according to the abstract, is that "not all vaccines have been demonstrated to be safe, effective or necessary". She's trying to show this in two specific cases. So really, it comes down to her arguments about those two vaccines.
There's a great deal of ideological mist in her thesis - a lot of general opinions that are hard to either definitely refute or definitely accept, because they're partially true. Vaccine policy probably is influenced by politics and money, for example, because that's true of human affairs in general. Vaccine policy isn't perfect. And some vaccines are more important than others. But that doesn't imply that vaccines are unsafe or useless, which is what she seems to be trying to suggest.
The problem is that all vaccines have to undergo extensive efficacy testing before they are permitted to sell them. There is no such thing as an untested pharmacological medicine. Ergo her claim ("not all vaccines have been demonstrated to be safe, effective or necessary") is not true and not appropriate for any PhD thesis, not even a social science one.

There can be adverse effects that are only found after the introduction of a vaccine. That's the purpose of the VAERS database in the USA - to monitor for such adverse effects. And, adverse effects have been found using the VAERS database.
Not all adverse effects can be found using such a reporting system. For example, to find delayed adverse effects, epidemiological studies are done.
Editor's note: A detailed analysis of what Wilyman has written about the HPV and swine flu vaccines is required. However, the following items do look at some specific claims.

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INCORRECT ASSERTION ABOUT HPV VACCINATION;

Page 241, section 9.8 The Efficacy of HPV Vaccines in the Prevention of Cervical Cancer:

"The expression of disease from an HPV infection depends upon environmental and lifestyle co-factors and most HPV infections are harmless if these co-factors are not also present."

Wilyman provides no evidence for her claim 'most HPV infections are harmless if these co-factors are not also present." Is she really saying that we don't need to worry about the consequences of HPV infection, like cervical cancer?
For one registered long term trial that proves the HPV vaccination works and has no serious side effects go to "Long-Term Follow-up Observation of the Safety, Immunogenicity, and Effectiveness of Gardasil™ in Adult Women", Joaquin Luna et al, published: December 31, 2013 which concludes: "Vaccination with qHPV vaccine provides generally safe and effective protection from HPV 6-, 11-, 16-, and 18-related genital warts and cervical dysplasia through 6 years following administration to 24–45 year-old women." [12]
Wilyman's omission of this research paper, published two years before her 'thesis' is telling; it says much for her bias against vaccines. One can only conclude that Wilyman ignored this paper because it did not fit her predisposition.
And to put this matter to rest, the latest research confirms that "Vaccination protects against invasive HPV-associated cancers". [13]

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INFLUENZA AND SOCIAL CONDITIONS

Page 276, section 10.6 Influenza Pandemic 1918-1919 (Spanish Flu):

"Approximately thirty percent of the US population was affected by influenza in 1918-19 but despite this, its impact passed quickly in the US and other developed countries. In comparison, mortality rates in the developing countries were much higher. ... This indicates that social conditions are a major factor in the mortality associated with influenza."

This is true. From http://jid.oxfordjournals.org/.../197/Supplement_1/S34.long: "Colonial India experienced ~18 million deaths [in the 1918-1919 flu pandemic], possibly more than all other nations combined. This was most likely due to malnutrition and the dense, unsanitary living conditions so often associated with poverty. Limited access to basic resources

[12] http://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0083431

[13] 'Vaccination protects against invasive HPV-associated cancers' Tapio Luostarinen et al Int J Cancer, in press 2018.

continues to be one of the best predictors of mortality during any disease outbreak, especially among the world's impoverished majority."
Impoverished people and poor countries do suffer more during outbreaks of diseases. This is one reason why vaccination is especially important for them!
For some other reasons, see *The Global Value of Vaccination* by J. Ehreth (see http://www.uvm.edu/~bwilcke/ehreth.pdf): "The rationale for investing in immunisation programs in developing countries is clear. These programs ... are highly cost effective, have significant economies of scale, and can be financially sustained by developing countries. The World Bank considers that a health care intervention is cost-effective if it buys a year of healthy life for less than the pro-capita gross national product (GNP) of the country. Most immunizations cost less than US$50 per healthy life year saved. ... When infectious diseases are not controlled, they can place a tremendous burden on the economy of communities and regions ... Vaccination is one of the few preventative public health measures that directly saves money. ... An American Journal of Public Health study documented a 14:1 return on investment for the MMR vaccine. ... In the developing world, ... for less than US$20 in vaccine and administration costs, a child can be immunised against polio, diphtheria, pertussis, measles and tetanus. Additional life-saving vaccines could be added for approximately US$10 per vaccine. Vaccines are unquestionably one of the most cost-effective public health measures available, yet they are undervalued and under-utilised throughout the world."
Also see "Stigma in the Time of Influenza: Social and Institutional Responses to Pandemic Emergencies",
https://www.researchgate.net/publication/5583431_Stigma_in_the_Time_of_Influenza_Social_and_Institutional_Responses_to_Pandemic_Emergencies

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VACCINATION STRESS AND INFLUENZA

Page 277, section 10.6 Influenza Pandemic 1918-1919 (Spanish Flu):

"The question remains as to why young adults were so susceptible to this virus in 1918 and some suggestions are that military generations were subject to more stress. … Stress may also have been enhanced in 1918 by the vaccinations provided to the troops before departing or as a result of the trauma of the military situation (Hays 2000; Allen 2007). The vaccines for smallpox and typhoid may have caused stress on the constitution of soldiers and in combination with the stressful conditions, poor nutrition and hygiene this could have resulted in the higher number of deaths due to a greater susceptibility to secondary infections (Allen 2007)."

Wilyman speculates that stress from vaccinations is the reason for susceptibility to influenza! But research suggests a different explanation. The 1918 influenza virus was reconstructed and tested on macaques, see "Aberrant innate immune response in lethal infection of macaques with the 1918 influenza virus"
https://www.researchgate.net/publication/6572879_Aberrant_Innate_Immune_Response_in_Lethal_Infection_of_Macaques_With_the_1918_Influenza_Virus
The researchers compared infection with the 1918 flu virus to a standard seasonal flu infection. They found that the 1918 virus caused a dysregulated immune response in the monkeys that caused much more tissue damage than seasonal flu - but didn't control the infection. So, in the 1918 pandemic, the flu caused severe tissue damage in people's lungs. That allowed bacterial pneumonia to develop, which was what actually killed people.

As for why the 1918 flu was particularly lethal for young adults, “Historical records and findings from laboratory animal studies suggest that persons who were exposed to influenza once before 1918 (eg, A/H3Nx 1890 pandemic strain) were likely to have dysregulated, pathologic cellular immune responses to infections with the A/H1N1 1918 pandemic strain. The immunopathologic effects transiently increased susceptibility to ultimately lethal secondary bacterial pneumonia.” See http://wwwnc.cdc.gov/eid/article/18/2/10-2042_article

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TYPHOID VACCINE

Page 277, section 10.6 Influenza Pandemic 1918-1919 (Spanish Flu):

“In 1912 typhoid vaccine was made mandatory even though the vaccine was known to have serious side effects. During World War I the vaccinated United States force suffered 1500 cases of typhoid, 227 deaths to typhoid and more than 35,000 soldiers were made ill from the vaccine.”

The typhoid vaccine was first introduced in World War I, and it saved many soldiers’ lives. Typhoid fever killed many soldiers in previous wars. For example, in the Spanish-American war in 1898, 142 out of every 1000 soldiers per year were sickened by typhoid fever, and 15 of those 142 soldiers died from it.
But in World War I the soldiers were vaccinated, and only 0.37 out of every 1000 soldiers per year were sickened by typhoid fever, and 0.05 died from it.
See https://history.amedd.army.mil/booksdocs/wwii/PM4/CH22.Typhoid.htm
Had the typhoid incidence rates of 1898 been applied to the troops mobilized for World War I, there would have been 500,000 cases and over 50,000 deaths.
The typhoid vaccine seems to have been extremely effective, especially when the whole army was vaccinated.
However, the vaccine wasn’t a pleasant experience. Typhoid vaccines during World War 1 comprised a large injection of endotoxin and made most soldiers sick. More than 35,000 of roughly 4 million vaccinated US soldiers were admitted to hospital after vaccination. In view of the 10% case-fatality rate and the 3-6 month hospital stay associated with typhoid fever, along with the constant exposure to faecal contaminated environments, why vaccination against the disease was not made compulsory, even with known side-effects, is difficult to understand. So there was about a 1% hospitalisation rate after the vaccine.

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WORLD HEALTH ORGANISATION CONSPIRACIES

Page 292, section 10.13 Conclusion:

“*The ‘Swine Flu’ pandemic of 2009 was declared by a secret WHO committee that had ties to pharmaceutical companies that stood to make excessive profits from the pandemic.”*

Wilyman provides no evidence that the committee’s proceedings were “secret”.
Wilyman’s allegation that the WHO made decisions that were directed by and benefited pharmaceutical companies describes the phenomenon well-known in management and politics as “regulatory capture”. This is a form of government failure which occurs when a regulatory agency, created to act in the public interest, instead advances the commercial or political

concerns of special interest groups that dominate the industry or sector it is charged with regulating.
Wilyman used the term "regulatory capture" in her thesis but provided no evidence of this occurring; she simply made the allegation. Nor did she describe how management and government should manage it, and how they failed to do so. Regulatory capture is managed with good enabling legislation, internal and external audit and oversight, enforcement powers and resources, training and education. She might have learned much from the Wikipedia page on that or the several management textbooks available from Amazon.com at the time of her thesis, such as *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*, Cambridge University Press, 2013.
Wilyman accused the WHO of regulatory capture preferring the interests of the pharmaceutical industry over those of the general public without providing any evidence.

……..

ASSUMPTION

Page 296, section Conclusion:

"*The theory of vaccine-induced immunity is based on the assumption that immunity is gained solely from the presence of antibodies to combat the pathogen and not on the interaction of complex body systems."*

Clearly that's wrong; immunological systems are incredibly complex, and the theory is not based on 'assumptions' but well-established science.

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INDUSTRY INFLUENCE

Page 304, section 11.3 Industry Influence and Undone Science in Public Policy:

" *.... industry has influence in ATAGI decisions ...".*

A check of the ATAGI Membership (at January 2017, close to the time of Wilyman's thesis)[14] shows 12 academic and professional voting members, six ex-officio members who are all senior government executives, and the head of NCIRS. Not one pharmaceutical representative. ATAGI has published its processes to identify and manage conflicts of interest, and they are quite comprehensive.[15] Wilyman has provided no evidence to support her allegation.

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[14] http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/FC7BB2DC63225F8ACA257D770012DBF7/$File/ATAGI-Membership-28072017.pdf

[15] http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/FC7BB2DC63225F8ACA257D770012DBF7/$File/ATAGI-conflict-interest.pdf

MASS VACCINATION MOTIVATION

Page 306, section 11.4 Conclusion:

"Claim 1: Most mass vaccination campaigns were introduced into developed countries after 1950 in an attempt to eliminate infectious diseases, not because infectious diseases were a serious risk to the majority of Australian children."

30 seconds of searching reveal some serious alarm bells, to wit, citing Geiers, Tomljenovic and Shaw. If you are going for discredited researchers, why not Wakefield, too?

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INCORRECT BOOK REFERENCE

Page 354, Bibliography:

The very first reference in the bibliography is to Ada G and Isaacs D. 2000. *Vaccination: the facts, the fears, the future.* Sydney: Allen and Unwin.
This book is not cited in the text at all, and totally refutes everything that Wilyman has ever had to say about vaccines.

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POOR CITATION

Page 379, Bibliography:

Wilyman cites the website of the World Association for Vaccine Education (WAVE), Vaccine Ingredients and Adverse Events. This is a site produced by the world's leading anti-vaccine cranks. For Wilyman to cite them as authoritative says much for her propensity for bias.

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OUR CONCLUSIONS

When Wilyman was awarded her PhD, Australia's medical and scientific communities were horrified. It was soon reported that the examining panel did not have a single member with a scientific background, let alone a background in immunology or epidemiology to judge the merits of the thesis. While the names of the three examiners have been kept confidential, we *do* know that they are all scholars of the humanities, not scientists. Nor, it would appear, did they have any familiarity with how governments develop policy; remember this was a thesis about government policy development.
To be passed, a PhD thesis must be judged as having made an original contribution to a body of thought; a thesis is not, however, a peer-reviewed publication in itself. For a thesis' findings to have credibility they need to be published in peer-reviewed scholarly journals, something Wilyman has failed to achieve.

For a thesis titled “A critical analysis of the Australian government’s rationale for its vaccination policy”, Wilyman demonstrates a remarkable ignorance of how governments and UN agencies operate and develop policy.
Wilyman’s thesis was much ridiculed in the mainstream media and condemned in academia and by health authorities. We need go no further than to refer to the letter to the VC of the University of Wollongong from Professor John Dwyer, AO, President Friends of Science in Medicine. Prof Dwyer, writing on behalf of 1200 Australian clinicians and scientists, refers to Wilyman’s thesis as containing “numerous factual errors particularly in the areas of epidemiology and immunology” and suggests that “Ms Wilyman’s work is biased and incredible and not worthy of the degree awarded.” We agree.

POST SCRIPT

Misrepresentation of the thesis title.

Wilyman misrepresents the title and nature of her thesis in her signature block in her newsletters. She claims that it is “*PhD in* The Science and Politics of the Australian Government’s Vaccination Program”.

Dr. Judy Wilyman
Bachelor of Science, University of NSW
Diploma of Education (Science), University of Wollongong
Master of Science (Population Health), Faculty of Health Sciences, University of Wollongong.
PhD in The Science and Politics of the Australian Government's Vaccination Program, UOW School of Social Science, Media and Communication (re-named the School of Humanities and Social Inquiry in 2014).

In reality, the thesis is titled “*A critical analysis of the Australian government’s rationale for its vaccination policy.”* No mention of science there. And as seen above, there’s no science in her thesis at all.


UNIVERSITY OF WOLLONGONG AUSTRALIA

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Research Online

University of Wollongong Thesis Collection 1954-2016

University of Wollongong Thesis Collections

2015

A critical analysis of the Australian government’s rationale for its vaccination policy

Judy Wilyman
University of Wollongong

Why the misrepresentation? Could it be that she wants people to believe that in some way her PhD is science-based? It is not. It is a highly flawed document that will dissuade people from immunising themselves and their children.

Wilyman uses her PhD ‘thesis’ to boost her credibility to her audience. If she is believed, the consequences are more preventable diseases, suffering, death, and stress on the health budget. The ‘thesis’ deserves a thorough re-examination.

ACKNOWLEDGEMENTS

This list was compiled by Ken McLeod.

Acknowledgements and thanks must go to members of the Facebook group “Judy Wilyman PhD thesis critique” for their assistance: David Pennington, Rohan Gaiswinkler, Rachel Heap, John Cunningham, Bree Nicole, Sue Ieraci, Leonie Price, Peter Bowditch. If we have missed anyone please notify us and we will fix it.

-

FURTHER READING – OTHER CRITICISMS:

WIKIPEDIA ARTICLE

Wikipedia summarises some of the criticisms as follows:
University of Auckland biological scientist Helen Petousis Harris who has a PhD in Vaccinology was highly critical of the thesis and writes:
"Wilyman's 'references to support these outrageous comments are from the bottom dwelling literature that includes 50-year-old discussions along with well-established, thoroughly debunked pseudoscience. At no point does she mention any of the vast scientific literature that includes large clinical and epidemiological studies - or attempt a critique of it.
"It is [a] litany of deceitful reveries. How it could possibly pass as a piece of Doctoral level work is inexplicable and it has made no contribution to knowledge. Shame on you University of Wollongong."
Saxon Smith, president of the NSW branch of the AMA, characterised it as "a thesis that's talking about the science of medicine without any support of its argument from credible scientific literature", adding "the evidence is clear about the safety of vaccines".
Professor Alison Campbell, an associate dean and biological sciences lecturer at the University of Waikato, produced a blistering analysis criticising the use of out-of-date references as well as pointing out numerous scientific errors in Wilyman's master's work, including calling the unexplained exclusion of two of four types of vaccine components "an alarming omission for a paper on immunisation".
The Medical Journal of Australia criticised the university in awarding a PhD to a student "demonstrating a glaring lack of understanding of immunology and vaccine science," suggesting that unless legislation keeps the anti-vaccination movement in check "we are ushering in a dangerous time".
Professor John Dwyer AO, emeritus professor of medicine at the University of New South Wales, wrote: "[Ms Wilyman] has endorsed a conspiracy theory where all sorts of organisations with claimed vested interests are putting pressure on WHO to hoodwink the world into believing that vaccines provide more benefits than they cause harm. Many well-established concepts in science are being challenged in this thesis with no data to support the conclusions provides [sic]." He pointed out that numerous leading scientists and at least five major scientific organisations are criticising the university for rewarding poor scholarship and asking that the thesis be re-examined by experts in immunology and epidemiology, which is what the thesis addresses.
In a February 2016 media-release the Royal Australasian College of Physicians (RACP) directly questioned suggestions of bias from Wilyman. In challenging central arguments of her thesis, the RACP highlighted that the TGA is the regulatory body responsive to the monitoring and investigation of any adverse events and any significant concerns around vaccination safety.
American surgical oncologist David Gorski refers to the thesis as an academic travesty, pseudoscientific and containing "easily refutable downright incorrect information".

DR HELEN PETOUSIS-HARRIS.

An article by University of Auckland biological scientist Helen Petousis Harris, who has a PhD in Vaccinology, titled "*A PhD By Stealth (BS) – What are University of Wollongong thinking?"* **[16]** should be read in full at her website, but following are few quotes referring to Wilyman's PhD thesis:

[16] https://sciblogs.co.nz/diplomaticimmunity/2016/01/14/a-phd-by-stealth-bs-what-are-university-of-wollongong-thinking/

"Wollongong University has accepted a Doctoral thesis so fatally flawed even an arrested Koala could spot the shortcomings."
"If you are going to blow off every major global health organisation including the WHO, every government, every medical college of experts, you should have a damn good argument. The work has been heavily criticised by Australian experts for good reason."
"It is a conclusion that appears to come before any observation. Who starts an abstract off with their conclusion? This is effectively a priori – you have decided what you expect independent of experience."
"Her references to support these outrageous comments are from the bottom dwelling literature that includes 50-year-old discussions along with well-established, thoroughly debunked pseudoscience."
"At no point does she mention any of the vast scientific literature that includes large clinical and epidemiological studies – or attempt a critique of it."
"Did anyone qualified in clinical trials or epidemiology and in particular, vaccinology, examine this work?"
"Fact: Vaccines are the most rigorously researched medicines and the evidence is vast. Wilyman has chosen to ignore it."
"Vaccine safety the science is hardly bereft of funding and most definitely not 'undone', it is simply that Wilyman refuses to include any of the actual evidence. This is a gross example of cherry picking among a million orchards of heavily laden trees."
"*Her arguments with regard to HPV deny germ theory and call upon the usual anti-vaxer rhetoric and pseudoscience which she shamelessly cites while dismissing the global scientific data on the topic."*
"*Her denial of the 2009-10 influenza pandemic is offensive and disrespectful to all those who lost family members to the disease."*

Dr Petousis-Harris also published an article *"Wilyman's 'thesis' from a relativistic viewpoint?"* [17] Some quotes:
"It's rather like a sociologist who insists that jet aircraft remain aloft only because of a conspiracy between aeronautical engineers and greedy airlines. Perhaps Wollongong already has someone working on such a thesis."
"I have scrolled though Wilyman's references; she does not seem interested in literature that assesses vaccine safety or efficacy. But then again, her framework is 'undone research' so I suppose that would contravene her assumptions, best to just leave them all out!"
"Wilyman hasn't done any research. She has not proposed a theory. She has simply regurgitated anti-vax rhetoric without question – a fact that has already been thoroughly pointed out."
"What really leaves me flabbergasted is this statement: 'SAVNers [Stop the AVN] and some others apparently believe the only people qualified to comment about vaccination policy are 'experts' who have degrees and refereed publications in scientific journals, for example in immunology or epidemiology.' A moment's reflection should reveal the flaw in this claim: being an expert in immunology or epidemiology - usually a narrow aspect of such a field - gives no special insight into vaccination policy, which involves many different areas of knowledge, and includes matters of ethics and politics. If anyone can lay claim to having special knowledge about policy, it is those who have researched policy itself, including critics of the Australian government's policy such as Judy.'

DR DAVID GORSKI
David Gorski MD, PhD, [18] has published an article *"The University of Wollongong issues a*

[17] https://sciblogs.co.nz/diplomaticimmunity/2016/01/15/wilymans-thesis-from-a-relativistic-viewpoint/
[18] https://en.wikipedia.org/wiki/David_Gorski

PhD in antivaccine pseudoscience." [19] His article should be read in full at his website, but here are few quotes referring to Wilyman's PhD thesis:
"I've just learned of a PhD candidate who really, really needed to have some very uncomfortable questions asked by her thesis committee and at her thesis seminar and defense, questions that apparently were not asked."
"What I've read so far reveals a level of ignorance and burning stupid so profoundly painful for anyone with even a rudimentary understanding of vaccine science and skepticism that it's hard for me to figure out how even a humanities department could let such a travesty pass for a PhD thesis. The University of Wollongong should be utterly ashamed, and should be shamed far and wide throughout the blogosphere. It is an embarrassment. I wondered how any self-respecting university could allow such a thesis to pass or even admit such a woefully clueless antiscience PhD student. Her PhD has to meet the rigorous standards set by the university."
"I understand that one of the key aspects of academic freedom is the freedom to explore controversial views. I also understand that the humanities are different from the sciences However, respect for controversial views and the freedom to explore them as part of a PhD thesis does not absolve the thesis advisor or university of the obligation to its students and reputation to make sure that any thesis consisting of examining such views is based in the highest academic standards and rooted in evidence. When the humanities critically examine science, the science must be represented correctly and based on evidence. Wilyman's thesis clearly fails this test embarrassingly. The University of Wollongong and Judy Wilyman's thesis advisor Brian Martin have utterly failed in this, preferring to allow Wilyman to use her thesis as a means of lending academic legitimacy to her pseudoscientific antivaccine crank views. In essence, the University of Wollongong allowed an antivaccine activist to use it as a means of getting a PhD rooted in antivaccine pseudoscience."

DR KERRIE WILEY, PROF JULIE LEASK, PROF MARGARET BURGESS, AND PROF PETER MCINTYRE

In their paper[20] published in *Vaccine*, "PhD thesis opposing immunisation: Failure of academic rigour with real-world consequences" Dr Kerrie Wiley, Prof Julie Leask, Prof Margaret Burgess, and Prof Peter McIntyre found, inter alia:

"This thesis is notable for its lack of evidence of systematic literature review. Despite its extensive claims, there is no primary research, but there is abundant evidence of strong bias in selecting the literature cited and sometimes outright misrepresentation of the facts."

Compiled 3 December 2020[i]

[19] https://respectfulinsolence.com/2016/01/13/the-university-of-wollongong-issues-a-phd-in-antivaccine-pseudoscience/?utm_source=twitterfeed&utm_medium=facebook
[20] Vaccine 37 (2019) 1541 – 1545