

**The Skeptic Zone**  
**Show 304 - 17 Aug 2014**



**Dr Rachie Reports**

1  
00:00:22,330 --> 00:00:09,110  
welcome to the skeptic zone the podcast

2  
00:00:28,340 --> 00:00:25,010  
hello and welcome to the skeptic zone

3  
00:00:31,070 --> 00:00:28,350  
for the 17th of August 2014 Richard

4  
00:00:34,670 --> 00:00:31,080  
Saunders here with you from a very

5  
00:00:36,920 --> 00:00:34,680  
chilly colder Park Raceway and near

6  
00:00:38,750 --> 00:00:36,930  
Melbourne I've come down here to do some

7  
00:00:43,130 --> 00:00:38,760  
in-car video which I do from time to

8  
00:00:45,619 --> 00:00:43,140  
time and DVD production and I'm just

9  
00:00:48,290 --> 00:00:45,629  
sort of between my duties at the moment

10  
00:00:50,600 --> 00:00:48,300  
I'm up here in the control room which is

11  
00:00:52,939 --> 00:00:50,610  
heated I'm delighted to say looking down

12  
00:00:55,880 --> 00:00:52,949  
on the racetrack and there goes car 14

13  
00:00:58,549 --> 00:00:55,890

screaming past but it is mighty cold

14

00:00:59,750 --> 00:00:58,559

here at called park well named part but

15

00:01:00,979 --> 00:00:59,760

you don't want to know about that you

16

00:01:03,020 --> 00:01:00,989

want to know what's coming up on the

17

00:01:05,090 --> 00:01:03,030

skeptic zone this week we're going to

18

00:01:08,750 --> 00:01:05,100

kick off with dr. Reggie reports the

19

00:01:10,160 --> 00:01:08,760

welcome return of dr. Reggie she a

20

00:01:11,960 --> 00:01:10,170

couple of weeks ago a couple of months

21

00:01:14,060 --> 00:01:11,970

ago was that skeptics in the pub in

22

00:01:15,920 --> 00:01:14,070

Sydney great old thing goes number six

23

00:01:17,810 --> 00:01:15,930

wow it's tearing home where she

24

00:01:21,640 --> 00:01:17,820

addressed the crowd told them all about

25

00:01:24,200 --> 00:01:21,650

the success of the facebook group

26  
00:01:26,900 --> 00:01:24,210  
stopped the avian stopped the Australian

27  
00:01:29,210 --> 00:01:26,910  
but vaccination network what an

28  
00:01:32,540 --> 00:01:29,220  
interesting talk it is and what a fine

29  
00:01:35,660 --> 00:01:32,550  
lesson in skeptical activism which

30  
00:01:38,660 --> 00:01:35,670  
really really has results I urge you to

31  
00:01:41,510 --> 00:01:38,670  
listen carefully dr. Richie reports

32  
00:01:42,890 --> 00:01:41,520  
coming up at the top of the show okay

33  
00:01:44,930 --> 00:01:42,900  
what's happening now car number eights

34  
00:01:49,070 --> 00:01:44,940  
coming in

35  
00:01:50,480 --> 00:01:49,080  
passenger gets up it's a oh wow car

36  
00:01:53,360 --> 00:01:50,490  
number nine screaming down the street

37  
00:01:55,730 --> 00:01:53,370  
today where people get to come in and

38  
00:01:57,500 --> 00:01:55,740

race from Real Racing cuz why should I

39

00:01:59,120 --> 00:01:57,510

say they get to drive in them with an

40

00:02:00,560 --> 00:01:59,130

instructor to get a feeling what it's

41

00:02:02,540 --> 00:02:00,570

like to be in a real racing car and then

42

00:02:05,230 --> 00:02:02,550

they do hot laps with an instructor

43

00:02:09,740 --> 00:02:05,240

driving which is very thrilling indeed

44

00:02:11,180 --> 00:02:09,750

hmm well after dr. Reggie reports we

45

00:02:12,770 --> 00:02:11,190

have a week in science from the Royal

46

00:02:16,610 --> 00:02:12,780

Institution of Australia in the

47

00:02:18,320 --> 00:02:16,620

beautiful city of Adelaide and good on

48

00:02:20,210 --> 00:02:18,330

while they keep churning out a week in

49

00:02:22,400 --> 00:02:20,220

science well done Paul willison team

50

00:02:24,410 --> 00:02:22,410

well done indeed i'm judging by the

51  
00:02:27,710 --> 00:02:24,420  
letters I received a lot of people do

52  
00:02:31,250 --> 00:02:27,720  
enjoy that segment here comes car number

53  
00:02:32,570 --> 00:02:31,260  
55 to change passengers then we have a

54  
00:02:35,840 --> 00:02:32,580  
report about an article which appeared

55  
00:02:40,310 --> 00:02:35,850  
in the sunshine coast daily newspaper up

56  
00:02:46,040 --> 00:02:40,320  
in Queensland which tried to give

57  
00:02:48,710 --> 00:02:46,050  
balance to pro and anti immunization but

58  
00:02:50,720 --> 00:02:48,720  
failed spectacularly and you'll know why

59  
00:02:54,530 --> 00:02:50,730  
when we have the original article read

60  
00:02:57,500 --> 00:02:54,540  
out and will read out a typical reply

61  
00:03:00,790 --> 00:02:57,510  
sent by the editor of the magazine when

62  
00:03:02,570 --> 00:03:00,800  
skeptics voiced their our concern and

63  
00:03:04,729 --> 00:03:02,580

finally we're going to have the open

64

00:03:08,540 --> 00:03:04,739

letter written by Ross pulse from

65

00:03:10,790 --> 00:03:08,550

Brisbane that was published I think

66

00:03:15,530 --> 00:03:10,800

published at least online maybe in print

67

00:03:18,590 --> 00:03:15,540

itself another good example of skeptical

68

00:03:21,229 --> 00:03:18,600

activism so I urge you to especially

69

00:03:23,540 --> 00:03:21,239

listen to the open letter at the end of

70

00:03:25,580 --> 00:03:23,550

the show now before we get stuck into

71

00:03:28,660 --> 00:03:25,590

the show a couple little messages and

72

00:03:31,910 --> 00:03:28,670

information don't forget to visit

73

00:03:34,100 --> 00:03:31,920

Maynard condotta you our report of

74

00:03:36,860 --> 00:03:34,110

maynards own website he has his own

75

00:03:39,620 --> 00:03:36,870

podcast called bunga bunga which is a

76

00:03:43,790 --> 00:03:39,630

lot of fun unga-bunga check it out at

77

00:03:45,199 --> 00:03:43,800

Manor com got a you and he does that

78

00:03:46,699 --> 00:03:45,209

with Tim Ferguson who is one of the

79

00:03:48,830 --> 00:03:46,709

members of the Doug Anthony all-stars

80

00:03:51,740 --> 00:03:48,840

Australians will know who i am talking

81

00:03:55,190 --> 00:03:51,750

about and also in the last week I was on

82

00:03:56,050 --> 00:03:55,200

a podcast skeptically challenged south

83

00:03:59,830 --> 00:03:56,060

you google sky

84

00:04:01,960 --> 00:03:59,840

ethically challenged podcast it's me

85

00:04:05,830 --> 00:04:01,970

having a talk about all the things I've

86

00:04:07,930 --> 00:04:05,840

been doing so the tables are turned and

87

00:04:09,580 --> 00:04:07,940

this time I get interviewed and I talked

88

00:04:13,030 --> 00:04:09,590

about the vaccination chronicles video

89

00:04:14,770 --> 00:04:13,040

and the Australian skeptics and what it

90

00:04:16,090 --> 00:04:14,780

was like to be on TV a couple years back

91

00:04:19,360 --> 00:04:16,100

and all sorts of things so you might

92

00:04:20,949 --> 00:04:19,370

find that interesting as now it's this

93

00:04:25,690 --> 00:04:20,959

car coming down the straight now here it

94

00:04:28,750 --> 00:04:25,700

comes screaming along it's car number 55

95

00:04:32,850 --> 00:04:28,760

there goes followed closely by car

96

00:04:34,649 --> 00:04:32,860

number 14

97

00:04:36,929 --> 00:04:34,659

well that's enough nail-biting

98

00:04:38,820 --> 00:04:36,939

excitement from for me up here in the

99

00:04:42,059 --> 00:04:38,830

control booth of the colder park raceway

100

00:04:43,860 --> 00:04:42,069

I'm going to venture outside try to at

101  
00:04:45,360 --> 00:04:43,870  
least it's pretty cold outside going to

102  
00:04:48,809 --> 00:04:45,370  
go down to the look hand team there

103  
00:04:50,700 --> 00:04:48,819  
maybe have a a chip or two maybe I

104  
00:05:07,909 --> 00:04:50,710  
should have an apple hmm well I'm doing

105  
00:05:17,429 --> 00:05:11,309  
now it's time for dr. Richie reports

106  
00:05:20,550 --> 00:05:17,439  
with dr. Rachel Dunlop okay so tonight

107  
00:05:23,760 --> 00:05:20,560  
we have dr. Rachel done lot will be

108  
00:05:27,719 --> 00:05:23,770  
talking about the SAV n which actually

109  
00:05:30,360 --> 00:05:27,729  
should now be the SAV sm right Severson

110  
00:05:35,219 --> 00:05:30,370  
we haven't we really don't bother going

111  
00:05:36,540 --> 00:05:35,229  
there far hyphenated but I've we wonder

112  
00:05:40,950 --> 00:05:36,550  
how much time they will have to actually

113  
00:05:42,629 --> 00:05:40,960

get there sa vie avsm established rachel

114

00:05:44,879 --> 00:05:42,639

is a constant campaign a member of a

115

00:05:46,170 --> 00:05:44,889

stop the avian and I think she'll be

116

00:05:51,360 --> 00:05:46,180

talking about that this evening Thank

117

00:05:53,640 --> 00:05:51,370

You Rachel thank you Tim I was wanted to

118

00:05:56,249 --> 00:05:53,650

talk to you tonight about some research

119

00:05:57,959 --> 00:05:56,259

that stopped the Australian vaccination

120

00:06:00,749 --> 00:05:57,969

network recently presented at an

121

00:06:03,869 --> 00:06:00,759

immunization conference and I think this

122

00:06:05,879 --> 00:06:03,879

is quite unique in the sense that if you

123

00:06:08,550 --> 00:06:05,889

know anything about s avian you'll know

124

00:06:11,100 --> 00:06:08,560

that we primarily are a Facebook page

125

00:06:13,439 --> 00:06:11,110

we're primarily a bunch of diligent

126

00:06:15,930 --> 00:06:13,449

ratbags if you like so we're just a

127

00:06:20,159 --> 00:06:15,940

rough sort of gathering of people that

128

00:06:23,640 --> 00:06:20,169

came together in 2009 in fact the group

129

00:06:25,499 --> 00:06:23,650

was formed by Daniel Raphael a and since

130

00:06:27,779 --> 00:06:25,509

then we've grown to about 12,000 members

131

00:06:30,719 --> 00:06:27,789

but essentially we're not an organized

132

00:06:32,429 --> 00:06:30,729

group really our focus is facebook so

133

00:06:35,820 --> 00:06:32,439

that's kind of our official presence but

134

00:06:37,469 --> 00:06:35,830

we do have a different levels of

135

00:06:38,939 --> 00:06:37,479

expertise across the group and some of

136

00:06:43,769 --> 00:06:38,949

that includes scientists medical

137

00:06:47,159 --> 00:06:43,779

professionals also lay people and we

138

00:06:50,550 --> 00:06:47,169

decided after some some questions from

139

00:06:53,579 --> 00:06:50,560

people in the immunization research

140

00:06:55,950 --> 00:06:53,589

field that wanted to know well okay you

141

00:06:57,570 --> 00:06:55,960

guys have been going since 2009 but what

142

00:07:00,209 --> 00:06:57,580

evidence do you have that you're having

143

00:07:02,249 --> 00:07:00,219

any impact on the avian you need to do

144

00:07:03,300 --> 00:07:02,259

some analysis and we thought well you

145

00:07:06,149 --> 00:07:03,310

know what that's actually a good point

146

00:07:08,360 --> 00:07:06,159

and we do have scientists and medical

147

00:07:10,800 --> 00:07:08,370

doctors and statisticians and

148

00:07:12,450 --> 00:07:10,810

epidemiologists in our midst

149

00:07:14,580 --> 00:07:12,460

so we thought it's about time we got off

150

00:07:17,700 --> 00:07:14,590

our proverbial sand actually did

151  
00:07:20,010 --> 00:07:17,710  
something that we could present to the

152  
00:07:22,950 --> 00:07:20,020  
scientific community and so that

153  
00:07:24,810 --> 00:07:22,960  
resulted in this long title which is a

154  
00:07:27,690 --> 00:07:24,820  
poster that was presented by Tracey

155  
00:07:30,570 --> 00:07:27,700  
McDermott as the first author Tracy is

156  
00:07:33,060 --> 00:07:30,580  
an undergraduate student she just began

157  
00:07:35,310 --> 00:07:33,070  
studying nursing and was at nursing or

158  
00:07:36,960 --> 00:07:35,320  
public health she's yeah she's a

159  
00:07:40,590 --> 00:07:36,970  
first-year public health undergraduate

160  
00:07:43,710 --> 00:07:40,600  
students so this poster was presented at

161  
00:07:45,600 --> 00:07:43,720  
the 14th annual public health

162  
00:07:47,310 --> 00:07:45,610  
association of Australian national

163  
00:07:49,830 --> 00:07:47,320

immunization conference so this is a

164

00:07:51,810 --> 00:07:49,840

prestigious well-respected conference in

165

00:07:53,490 --> 00:07:51,820

Melbourne and for Tracy to get the

166

00:07:56,670 --> 00:07:53,500

opportunity to go there and present this

167

00:07:58,490 --> 00:07:56,680

data was we think pretty cool so I'm the

168

00:08:00,840 --> 00:07:58,500

last author which means I basically just

169

00:08:03,930 --> 00:08:00,850

called the shots when people did stuff I

170

00:08:06,390 --> 00:08:03,940

didn't like but this is a collective

171

00:08:09,060 --> 00:08:06,400

effort Tracy is the first author so all

172

00:08:12,030 --> 00:08:09,070

complaints would go to her please of

173

00:08:13,500 --> 00:08:12,040

course Anne was involved there are other

174

00:08:15,029 --> 00:08:13,510

people that were involved in putting

175

00:08:17,490 --> 00:08:15,039

this work together whose names are not

176

00:08:19,440 --> 00:08:17,500

here but we're all volunteers we all did

177

00:08:22,230 --> 00:08:19,450

this in our spare time and I'm just

178

00:08:23,730 --> 00:08:22,240

going to go through some of the results

179

00:08:25,050 --> 00:08:23,740

that we got and that I think it's pretty

180

00:08:26,400 --> 00:08:25,060

cool that we were able to get this

181

00:08:28,140 --> 00:08:26,410

together and present it at a scientific

182

00:08:31,950 --> 00:08:28,150

conference because you still represents

183

00:08:34,680 --> 00:08:31,960

a publication for us so the impetus I

184

00:08:36,649 --> 00:08:34,690

guess for this was that as I mentioned

185

00:08:39,750 --> 00:08:36,659

we've been going since 2009 but

186

00:08:41,969 --> 00:08:39,760

throughout this time we'd observed that

187

00:08:43,680 --> 00:08:41,979

we thought the media had kind of changed

188

00:08:46,440 --> 00:08:43,690

the way it was treating the Australian

189

00:08:49,170 --> 00:08:46,450

vaccination network and i like to use

190

00:08:51,120 --> 00:08:49,180

his slide as an example of how the

191

00:08:54,000 --> 00:08:51,130

ex-president used to be referred to by

192

00:08:57,540 --> 00:08:54,010

the media this was from a talk that was

193

00:08:59,040 --> 00:08:57,550

in fact in 2010 i think where she was

194

00:09:02,970 --> 00:08:59,050

referred to as australia's leading

195

00:09:05,190 --> 00:09:02,980

expert in vaccination now this was one

196

00:09:07,320 --> 00:09:05,200

of the issues that we that we took with

197

00:09:10,110 --> 00:09:07,330

the way the media treated this group

198

00:09:11,790 --> 00:09:10,120

because this person doesn't have any

199

00:09:13,620 --> 00:09:11,800

qualifications his person doesn't have

200

00:09:15,960 --> 00:09:13,630

any experience in medicine this person

201  
00:09:17,760 --> 00:09:15,970  
doesn't have any statistics experience

202  
00:09:19,290 --> 00:09:17,770  
or any qualifications in fact she just

203  
00:09:23,370 --> 00:09:19,300  
she finished high school but didn't

204  
00:09:23,950 --> 00:09:23,380  
finish anything at university so when we

205  
00:09:25,810 --> 00:09:23,960  
came to

206  
00:09:29,500 --> 00:09:25,820  
will has the media's treatment or

207  
00:09:32,010 --> 00:09:29,510  
perception of the way they now refer to

208  
00:09:33,970 --> 00:09:32,020  
this group this was sort of our are

209  
00:09:36,310 --> 00:09:33,980  
beginning to see how things have gone

210  
00:09:38,200 --> 00:09:36,320  
since then so these are some of a

211  
00:09:40,960 --> 00:09:38,210  
selection of some of the news clips that

212  
00:09:42,760 --> 00:09:40,970  
I just found today from googling they

213  
00:09:45,340 --> 00:09:42,770

have occurred in the mainstream media in

214

00:09:48,340 --> 00:09:45,350

the last well five years since we since

215

00:09:50,230 --> 00:09:48,350

this stop avn has been around the way

216

00:09:52,060 --> 00:09:50,240

you used to have Australia's leading

217

00:09:55,120 --> 00:09:52,070

expert in vaccination you now get

218

00:09:58,260 --> 00:09:55,130

headlines in the Murdoch press that say

219

00:10:00,670 --> 00:09:58,270

things like anti-vaccine zealots

220

00:10:03,850 --> 00:10:00,680

anti-vaccine groups charity status

221

00:10:06,700 --> 00:10:03,860

opposed in Fairfax health experts call

222

00:10:08,320 --> 00:10:06,710

for ban on anti-vaccine campaigner and I

223

00:10:11,500 --> 00:10:08,330

bring to your attention the use of the

224

00:10:13,060 --> 00:10:11,510

term anti-vaccine this is something that

225

00:10:16,270 --> 00:10:13,070

we wanted to measure in our research

226

00:10:17,380 --> 00:10:16,280

because previously our and I guess what

227

00:10:19,120 --> 00:10:17,390

I'm trying to say is the way science

228

00:10:21,910 --> 00:10:19,130

works usually is people make an

229

00:10:23,770 --> 00:10:21,920

observation and then they go forward and

230

00:10:26,460 --> 00:10:23,780

test it so our observation was that the

231

00:10:30,940 --> 00:10:26,470

media had stopped calling these people

232

00:10:32,350 --> 00:10:30,950

vaccine watchdogs or parents groups who

233

00:10:34,870 --> 00:10:32,360

were lobbying for safety of vaccines

234

00:10:39,220 --> 00:10:34,880

they've now started calling them what

235

00:10:40,660 --> 00:10:39,230

they are anti-vaccine campaigners so we

236

00:10:42,820 --> 00:10:40,670

started to see all these things across

237

00:10:44,770 --> 00:10:42,830

the mainstream media we're able to

238

00:10:46,290 --> 00:10:44,780

actually measure this and I'll show you

239

00:10:48,310 --> 00:10:46,300

the results for that in a minute but

240

00:10:50,200 --> 00:10:48,320

some of the other things that happened

241

00:10:53,200 --> 00:10:50,210

is we didn't have to do all this work

242

00:10:55,510 --> 00:10:53,210

the Murdoch press actually helped us a

243

00:10:58,330 --> 00:10:55,520

little bit which I never thought I'd say

244

00:11:00,460 --> 00:10:58,340

really some of you may remember the

245

00:11:03,310 --> 00:11:00,470

Telegraph campaign called no job no play

246

00:11:04,870 --> 00:11:03,320

and this was actually spearheaded by

247

00:11:07,930 --> 00:11:04,880

journalists by the name of Jane Hansen

248

00:11:09,640 --> 00:11:07,940

and this ran over several weeks where

249

00:11:11,800 --> 00:11:09,650

the telegraph was campaigning to

250

00:11:15,370 --> 00:11:11,810

increase vaccination rates in New South

251  
00:11:18,970 --> 00:11:15,380  
Wales and also to discredit the

252  
00:11:20,260 --> 00:11:18,980  
anti-vaccination movement and in fact

253  
00:11:22,120 --> 00:11:20,270  
this campaign is now spread to

254  
00:11:26,470 --> 00:11:22,130  
Queensland unless they're doing some of

255  
00:11:28,630 --> 00:11:26,480  
his stuff in Queensland so I wanted to

256  
00:11:30,670 --> 00:11:28,640  
start with his slide because this was

257  
00:11:32,890 --> 00:11:30,680  
the response that we got from the

258  
00:11:36,490 --> 00:11:32,900  
Australian vaccination network once they

259  
00:11:37,540 --> 00:11:36,500  
found out we presented this poster and I

260  
00:11:39,220 --> 00:11:37,550  
wanted to highlight

261  
00:11:41,590 --> 00:11:39,230  
a couple of terms that they use because

262  
00:11:43,900 --> 00:11:41,600  
throughout the course of our work

263  
00:11:46,329 --> 00:11:43,910

they've they keep claiming that they

264

00:11:48,340 --> 00:11:46,339

want respect and everyone deserves

265

00:11:50,889 --> 00:11:48,350

respect everyone deserves freedom of

266

00:11:52,570 --> 00:11:50,899

speech and we should respect them so in

267

00:11:55,360 --> 00:11:52,580

fact it took them quite a few days I

268

00:11:57,610 --> 00:11:55,370

think and to find out we've been at the

269

00:11:58,960 --> 00:11:57,620

conference so we were sort of waiting

270

00:12:01,480 --> 00:11:58,970

with bated breath to see what their

271

00:12:04,530 --> 00:12:01,490

response would be but they referred to

272

00:12:07,300 --> 00:12:04,540

us as anti-competitive illegal behavior

273

00:12:10,090 --> 00:12:07,310

s avian and their leaders are deluded

274

00:12:12,370 --> 00:12:10,100

hateful and discriminatory people now

275

00:12:14,019 --> 00:12:12,380

keep in mind that this was scientific

276

00:12:16,500 --> 00:12:14,029

data presented at a scientific

277

00:12:19,150 --> 00:12:16,510

conference this was not some sort of

278

00:12:21,460 --> 00:12:19,160

fright bat column written in an opinion

279

00:12:23,650 --> 00:12:21,470

piece this was data we we put together

280

00:12:25,240 --> 00:12:23,660

as scientists they then called us

281

00:12:28,300 --> 00:12:25,250

religious fanatics whose God is

282

00:12:30,069 --> 00:12:28,310

pseudoscience and whose mantra is

283

00:12:33,639 --> 00:12:30,079

whoever disagrees with us should be

284

00:12:36,310 --> 00:12:33,649

subject to our Inquisition it goes on

285

00:12:40,240 --> 00:12:36,320

about how we are too stupid or something

286

00:12:42,760 --> 00:12:40,250

and but I particularly like this this

287

00:12:44,500 --> 00:12:42,770

last line about your members believe in

288

00:12:46,660 --> 00:12:44,510

pseudoscience and you have an amazing

289

00:12:48,910 --> 00:12:46,670

ability to ignore any and all scientific

290

00:12:52,329 --> 00:12:48,920

research that doesn't fit in with your

291

00:12:56,380 --> 00:12:52,339

own views on the subject I think that we

292

00:12:59,319 --> 00:12:56,390

need to highlight this don't you to me

293

00:13:02,740 --> 00:12:59,329

it sounds a little bit he put cat all

294

00:13:05,500 --> 00:13:02,750

yeah maybe or maybe they're just

295

00:13:07,810 --> 00:13:05,510

projecting projecting in her high

296

00:13:08,980 --> 00:13:07,820

definition perhaps so to going through

297

00:13:13,030 --> 00:13:08,990

some of the data that we put together

298

00:13:14,920 --> 00:13:13,040

for this poster so as I said the group

299

00:13:18,639 --> 00:13:14,930

was established by Daniel Raphael a on

300

00:13:21,160 --> 00:13:18,649

Facebook in 2009 there's now more than

301  
00:13:22,870 --> 00:13:21,170  
12,000 people that like the page which

302  
00:13:25,449 --> 00:13:22,880  
doesn't necessarily mean they're members

303  
00:13:27,100 --> 00:13:25,459  
or anything nobody pays a fee we don't

304  
00:13:29,019 --> 00:13:27,110  
collect funds we don't collect money

305  
00:13:30,579 --> 00:13:29,029  
we're not a charity but we're just a

306  
00:13:33,610 --> 00:13:30,589  
bunch of people that like the page and

307  
00:13:36,220 --> 00:13:33,620  
follow the procedures or the process of

308  
00:13:38,880 --> 00:13:36,230  
what's happening and I guess we use the

309  
00:13:41,500 --> 00:13:38,890  
novel technique of combating

310  
00:13:43,509 --> 00:13:41,510  
anti-vaccine misinformation primarily

311  
00:13:45,009 --> 00:13:43,519  
through social media so there's a lot of

312  
00:13:47,680 --> 00:13:45,019  
us that have very high presence on

313  
00:13:50,360 --> 00:13:47,690

Twitter as well and there's a number of

314

00:13:51,980 --> 00:13:50,370

very diligent admins that

315

00:13:54,410 --> 00:13:51,990

look after the facebook page and an is

316

00:13:56,540 --> 00:13:54,420

usually the night shift I tend to do the

317

00:13:59,269 --> 00:13:56,550

evening shift and then we have the guys

318

00:14:02,060 --> 00:13:59,279

during the day so basically one of the

319

00:14:03,920 --> 00:14:02,070

aims of our group is to to seek to

320

00:14:06,230 --> 00:14:03,930

inhibit the reach and influence of the

321

00:14:08,150 --> 00:14:06,240

avian and this is because not only

322

00:14:09,920 --> 00:14:08,160

because they actually profit in terms of

323

00:14:11,269 --> 00:14:09,930

money from perpetuating their

324

00:14:13,760 --> 00:14:11,279

misinformation but they're obviously

325

00:14:17,090 --> 00:14:13,770

doing harm now anyone that opens the

326

00:14:20,480 --> 00:14:17,100

papers these days even Eve here from

327

00:14:22,280 --> 00:14:20,490

Quebec would see that whooping cough is

328

00:14:24,829 --> 00:14:22,290

making a resurgence there's measles

329

00:14:26,150 --> 00:14:24,839

outbreaks all over the world now and a

330

00:14:28,100 --> 00:14:26,160

lot of this is being attributed to

331

00:14:30,079 --> 00:14:28,110

people not getting vaccinated in

332

00:14:31,940 --> 00:14:30,089

particular with the measles outbreaks

333

00:14:34,579 --> 00:14:31,950

we're looking now squarely down to

334

00:14:39,050 --> 00:14:34,589

andrew wakefield for the scare mongering

335

00:14:42,140 --> 00:14:39,060

he is responsible for in 1998 so this

336

00:14:44,810 --> 00:14:42,150

sort of stuff is not just science denial

337

00:14:48,200 --> 00:14:44,820

that annoys me because I'm a scientist

338

00:14:49,820 --> 00:14:48,210

it has a tangible effect and it often

339

00:14:52,970 --> 00:14:49,830

that results in kids getting sick and

340

00:14:55,640 --> 00:14:52,980

nobody wants that so we do this by

341

00:14:57,890 --> 00:14:55,650

several well actually we have a lot of

342

00:15:00,710 --> 00:14:57,900

fingers in a lot of pies but everything

343

00:15:02,150 --> 00:15:00,720

is legal and aboveboard I should say

344

00:15:05,210 --> 00:15:02,160

that because we were accused of doing

345

00:15:06,620 --> 00:15:05,220

illegal things in a slide before we do

346

00:15:09,740 --> 00:15:06,630

things like submit complaints to

347

00:15:11,360 --> 00:15:09,750

government bodies so for example the avn

348

00:15:12,860 --> 00:15:11,370

used to have a charity license we

349

00:15:15,920 --> 00:15:12,870

submitted complaints to that body that

350

00:15:17,960 --> 00:15:15,930

looked after those it was taken away we

351  
00:15:19,519 --> 00:15:17,970  
also and I think this is particularly

352  
00:15:22,370 --> 00:15:19,529  
important and I'm particularly proud of

353  
00:15:24,220 --> 00:15:22,380  
us for this as we offer ourselves as

354  
00:15:27,079 --> 00:15:24,230  
alternatives to the mainstream media

355  
00:15:29,570 --> 00:15:27,089  
journalists tend to have this practice

356  
00:15:31,579 --> 00:15:29,580  
where they'll do a balance story so

357  
00:15:33,829 --> 00:15:31,589  
they'll get somebody who is a doctor

358  
00:15:37,100 --> 00:15:33,839  
who's studied to be a pediatrician for

359  
00:15:38,690 --> 00:15:37,110  
20 years who works in infectious disease

360  
00:15:42,019 --> 00:15:38,700  
with children who get sick and then

361  
00:15:44,720 --> 00:15:42,029  
they'll say well hang on we need someone

362  
00:15:46,640 --> 00:15:44,730  
who has some reckons so they'll just

363  
00:15:48,860 --> 00:15:46,650

Google someone and find some person who

364

00:15:50,660 --> 00:15:48,870

reckons vaccines might be toxic and

365

00:15:52,910 --> 00:15:50,670

they'll put these two people on the same

366

00:15:57,110 --> 00:15:52,920

TV program and then say what do you

367

00:15:59,690 --> 00:15:57,120

reckon now that's normally okay because

368

00:16:01,370 --> 00:15:59,700

normally people's opinions are opinions

369

00:16:02,990 --> 00:16:01,380

and that's fine and you know you can say

370

00:16:04,220 --> 00:16:03,000

do you like blue or do not like blue and

371

00:16:06,740 --> 00:16:04,230

let's argue that until the cow

372

00:16:11,150 --> 00:16:06,750

come home no problem but when it comes

373

00:16:12,740 --> 00:16:11,160

to stories or information that involves

374

00:16:14,720 --> 00:16:12,750

science and medicine this can be

375

00:16:16,670 --> 00:16:14,730

particularly specious because it can

376

00:16:18,770 --> 00:16:16,680

result in people making the wrong

377

00:16:20,870 --> 00:16:18,780

decision based on false information and

378

00:16:23,540 --> 00:16:20,880

this is called false balance so for many

379

00:16:25,490 --> 00:16:23,550

many years the media would go to the avn

380

00:16:27,650 --> 00:16:25,500

and say okay what do you guys reckon and

381

00:16:29,330 --> 00:16:27,660

they would sit them on stage next to a

382

00:16:31,670 --> 00:16:29,340

pediatrician and they do their reckons

383

00:16:34,130 --> 00:16:31,680

so now we make an effort to offer

384

00:16:36,410 --> 00:16:34,140

ourselves up as experts or at least

385

00:16:38,510 --> 00:16:36,420

having some form of expertise so that

386

00:16:40,370 --> 00:16:38,520

we're there instead so that's what I

387

00:16:42,380 --> 00:16:40,380

mean by a considerable effort is placed

388

00:16:44,690 --> 00:16:42,390

on encouraging media outlets to stop

389

00:16:47,000 --> 00:16:44,700

doing false balance so the boring bits

390

00:16:49,370 --> 00:16:47,010

of how we went about this analysis is

391

00:16:50,930 --> 00:16:49,380

our methods and it's pretty simple and

392

00:16:53,650 --> 00:16:50,940

we have a lot more work to do but I

393

00:16:57,680 --> 00:16:53,660

think what we found was quite impressive

394

00:16:59,120 --> 00:16:57,690

this was done by one of our authors that

395

00:17:02,060 --> 00:16:59,130

you saw at the beginning so we looked

396

00:17:04,040 --> 00:17:02,070

through the print media for the last

397

00:17:06,610 --> 00:17:04,050

five years using a database called

398

00:17:10,520 --> 00:17:06,620

factiva which allows you to mine all

399

00:17:15,050 --> 00:17:10,530

incidences of mentions of a certain name

400

00:17:18,290 --> 00:17:15,060

of a VN or the name of the ex-president

401  
00:17:21,910 --> 00:17:18,300  
and then what we did was we classified

402  
00:17:24,320 --> 00:17:21,920  
these results according to two things-

403  
00:17:25,970 --> 00:17:24,330  
so was the press reporting in a negative

404  
00:17:28,970 --> 00:17:25,980  
fashion were they calling them

405  
00:17:30,500 --> 00:17:28,980  
anti-vaccine for example or positive

406  
00:17:33,590 --> 00:17:30,510  
where they referring to them as vaccine

407  
00:17:35,960 --> 00:17:33,600  
watchdogs are a non-profit parent group

408  
00:17:41,030 --> 00:17:35,970  
or something that didn't make them sound

409  
00:17:43,220 --> 00:17:41,040  
bad and we also looked at their finances

410  
00:17:45,260 --> 00:17:43,230  
because obviously one of the reasons

411  
00:17:48,470 --> 00:17:45,270  
that these people are able to gain

412  
00:17:50,330 --> 00:17:48,480  
access to parents and access to people

413  
00:17:53,300 --> 00:17:50,340

that want information about vaccines is

414

00:17:55,550 --> 00:17:53,310

if they've got enough money and back in

415

00:17:57,410 --> 00:17:55,560

2010 this group used to do a lot of two

416

00:17:59,510 --> 00:17:57,420

is where they go out they cross the

417

00:18:01,760 --> 00:17:59,520

whole country in fact and give seminars

418

00:18:03,830 --> 00:18:01,770

all over the place from Perth to

419

00:18:06,620 --> 00:18:03,840

Griffith to Queensland talking to

420

00:18:08,300 --> 00:18:06,630

parents and that requires money so we

421

00:18:10,400 --> 00:18:08,310

wanted to know if our campaign to

422

00:18:15,080 --> 00:18:10,410

discredit them had impacted on their

423

00:18:17,769 --> 00:18:15,090

finances and yes it did quite

424

00:18:20,119 --> 00:18:17,779

significantly actually

425

00:18:23,960 --> 00:18:20,129

this is a little dollop of science

426

00:18:26,570 --> 00:18:23,970

called a graph it's very sciency but

427

00:18:28,580 --> 00:18:26,580

basically what you can see is this red

428

00:18:33,019 --> 00:18:28,590

line here is indicating when si bien was

429

00:18:37,009 --> 00:18:33,029

formed and you can see here we've got

430

00:18:38,960 --> 00:18:37,019

the income that they made over time you

431

00:18:43,779 --> 00:18:38,970

can see that it plateaued and then fell

432

00:18:46,519 --> 00:18:43,789

in 2009 and beyond their expenses

433

00:18:49,700 --> 00:18:46,529

followed that line as well which means

434

00:18:51,349 --> 00:18:49,710

their profit is going down donations

435

00:18:53,930 --> 00:18:51,359

that they received because they rely on

436

00:18:57,200 --> 00:18:53,940

a lot of donations from the public they

437

00:18:58,639 --> 00:18:57,210

went up initially because they did they

438

00:19:00,109 --> 00:18:58,649

did ask for a lot of help when they

439

00:19:03,529 --> 00:19:00,119

initially started receiving criticism

440

00:19:06,259 --> 00:19:03,539

from us but then they fell almost down

441

00:19:08,149 --> 00:19:06,269

to zero by 2012 now you probably can't

442

00:19:11,509 --> 00:19:08,159

see this line here but it's pale blue

443

00:19:15,259 --> 00:19:11,519

and it follows the x-axis here perfectly

444

00:19:22,419 --> 00:19:15,269

can anyone read what that says it says

445

00:19:26,599 --> 00:19:22,429

donations by the avn from 1998 to 2012

446

00:19:29,419 --> 00:19:26,609

totals from what we calculated four

447

00:19:31,759 --> 00:19:29,429

hundred and eighty dollars now these

448

00:19:33,229 --> 00:19:31,769

people were a charity in New South Wales

449

00:19:36,710 --> 00:19:33,239

they were collecting money for

450

00:19:38,539 --> 00:19:36,720

charitable purposes allegedly but we can

451  
00:19:40,099 --> 00:19:38,549  
only find evidence in their financial

452  
00:19:43,190 --> 00:19:40,109  
records of donating four hundred and

453  
00:19:45,200 --> 00:19:43,200  
eighty dollars and just in case you

454  
00:19:47,180 --> 00:19:45,210  
don't know if you are a registered

455  
00:19:48,830 --> 00:19:47,190  
charity your finances are available

456  
00:19:50,659 --> 00:19:48,840  
online to anybody so we didn't do

457  
00:19:53,919 --> 00:19:50,669  
anything illegal to access them anyone

458  
00:19:57,049 --> 00:19:53,929  
can access a charity's financial records

459  
00:19:59,210 --> 00:19:57,059  
but on top of that if you do if you add

460  
00:20:00,710 --> 00:19:59,220  
all these up and subtract everything you

461  
00:20:03,469 --> 00:20:00,720  
find there's about a hundred thousand

462  
00:20:06,070 --> 00:20:03,479  
dollars missing as well don't know what

463  
00:20:08,389 --> 00:20:06,080

happened to that but the point is that

464

00:20:11,269 --> 00:20:08,399

financially we've had quite a big impact

465

00:20:13,580 --> 00:20:11,279

on their ability to operate so in

466

00:20:15,289 --> 00:20:13,590

summary it shows that since the

467

00:20:17,690 --> 00:20:15,299

formation of sav and there's been a

468

00:20:18,919 --> 00:20:17,700

decrease of fifty percent in income to

469

00:20:21,109 --> 00:20:18,929

this chart not well they're not a

470

00:20:23,359 --> 00:20:21,119

charity anymore and a seventy percent

471

00:20:25,639 --> 00:20:23,369

decrease in the number of donations that

472

00:20:27,169 --> 00:20:25,649

they've received so this is clearly

473

00:20:30,460 --> 00:20:27,179

going to impact their bottom line and

474

00:20:32,890 --> 00:20:30,470

their ability to get out and disseminate

475

00:20:36,669 --> 00:20:32,900

misinformation so the next thing we

476

00:20:38,770 --> 00:20:36,679

looked at was how the media has been has

477

00:20:40,330 --> 00:20:38,780

dealt with the avian since we've been

478

00:20:42,399 --> 00:20:40,340

trying to educate them about their true

479

00:20:45,580 --> 00:20:42,409

agenda and I should say that their name

480

00:20:47,260 --> 00:20:45,590

has since changed that acronym is still

481

00:20:49,090 --> 00:20:47,270

the avian but they were known as the

482

00:20:50,830 --> 00:20:49,100

Australian vaccination network for a

483

00:20:52,690 --> 00:20:50,840

very long time until quite recently in

484

00:20:54,940 --> 00:20:52,700

fact this year I think they had to

485

00:20:56,500 --> 00:20:54,950

change their name but the Australian

486

00:20:59,140 --> 00:20:56,510

vaccination networking sounds like quite

487

00:21:02,799 --> 00:20:59,150

an innocuous lame doesn't it it doesn't

488

00:21:04,930 --> 00:21:02,809

sound like it's anti anything so this in

489

00:21:06,460 --> 00:21:04,940

my opinion is deliberate because they

490

00:21:08,320 --> 00:21:06,470

don't want to stand up and say where the

491

00:21:10,480 --> 00:21:08,330

anti-vaccination network because then

492

00:21:13,149 --> 00:21:10,490

how are they going to coax parents into

493

00:21:14,470 --> 00:21:13,159

listening to them so they've since had

494

00:21:17,860 --> 00:21:14,480

to change their name to Australian

495

00:21:19,840 --> 00:21:17,870

vaccine skeptics network I let you argue

496

00:21:22,750 --> 00:21:19,850

whether the skeptics is possibly a

497

00:21:26,620 --> 00:21:22,760

little bit misguided but they still use

498

00:21:28,330 --> 00:21:26,630

the acronym avian in any case what we

499

00:21:30,190 --> 00:21:28,340

did here was we tracked the number of

500

00:21:31,950 --> 00:21:30,200

mentions in the media and we rank them

501  
00:21:36,220 --> 00:21:31,960  
according to positive or negative

502  
00:21:39,130 --> 00:21:36,230  
negatives up here in red and positives

503  
00:21:40,899 --> 00:21:39,140  
up here in blue this is the line where s

504  
00:21:43,450 --> 00:21:40,909  
avian was formed and you can see there's

505  
00:21:46,450 --> 00:21:43,460  
this massive increase in red those who

506  
00:21:48,700 --> 00:21:46,460  
are astute amongst you will also notice

507  
00:21:51,789 --> 00:21:48,710  
that there's an increase in the number

508  
00:21:53,049 --> 00:21:51,799  
of mentions over all these increasing

509  
00:21:57,250 --> 00:21:53,059  
proportion that was increasingly

510  
00:21:58,990 --> 00:21:57,260  
negative so we went from sixty-seven

511  
00:22:00,940 --> 00:21:59,000  
percent of these mentions where negative

512  
00:22:03,700 --> 00:22:00,950  
versus thirty-three percent over the

513  
00:22:06,060 --> 00:22:03,710

five years since SI bien was formed and

514

00:22:10,180 --> 00:22:06,070

this was compared to eighty-two percent

515

00:22:13,690 --> 00:22:10,190

were positive before we started working

516

00:22:14,830 --> 00:22:13,700

on this project so in summary affecting

517

00:22:17,049 --> 00:22:14,840

their bottom line in terms of their

518

00:22:18,549 --> 00:22:17,059

finances and affecting the media's

519

00:22:21,720 --> 00:22:18,559

impression and the way that the media

520

00:22:24,840 --> 00:22:21,730

treats them has multiple effects it's

521

00:22:28,240 --> 00:22:24,850

certainly impeded on their reputation

522

00:22:30,700 --> 00:22:28,250

there now probably the only place I'll

523

00:22:32,860 --> 00:22:30,710

get treated well and positively and as

524

00:22:35,919 --> 00:22:32,870

if they're doing a good job is is on

525

00:22:39,279 --> 00:22:35,929

conspiracy podcasts and on conspiracy

526  
00:22:42,789 --> 00:22:39,289  
websites the mainstream media except for

527  
00:22:44,180 --> 00:22:42,799  
very occasionally refers to them almost

528  
00:22:46,419 --> 00:22:44,190  
one hundred percent is anti back

529  
00:22:48,680 --> 00:22:46,429  
seen they no longer refer to them as a

530  
00:22:51,440 --> 00:22:48,690  
nice parent group he's just trying to

531  
00:22:53,509 --> 00:22:51,450  
look after vaccines so this has been

532  
00:22:56,720 --> 00:22:53,519  
this shift in media perception that

533  
00:22:58,970 --> 00:22:56,730  
we've tracked here has been compounded

534  
00:23:00,529 --> 00:22:58,980  
by several other projects that we've

535  
00:23:02,330 --> 00:23:00,539  
done on the side and these have been

536  
00:23:04,639 --> 00:23:02,340  
initiated by s avian and they involve

537  
00:23:06,139 --> 00:23:04,649  
government sanctions and these include

538  
00:23:09,470 --> 00:23:06,149

things like them losing their charity

539

00:23:11,659 --> 00:23:09,480

license are this includes them having a

540

00:23:13,850 --> 00:23:11,669

public warning issued by the healthcare

541

00:23:15,860 --> 00:23:13,860

Complaints Commission this includes them

542

00:23:17,869 --> 00:23:15,870

having to change their name to the

543

00:23:21,799 --> 00:23:17,879

Australian vaccine skeptic network to

544

00:23:23,539 --> 00:23:21,809

better indicate their true agenda and I

545

00:23:25,519 --> 00:23:23,549

think this is really important is that

546

00:23:27,049 --> 00:23:25,529

we've offered ourselves as experts were

547

00:23:29,570 --> 00:23:27,059

appropriate to the media in place of

548

00:23:31,639 --> 00:23:29,580

them so instead of just taking them away

549

00:23:33,259 --> 00:23:31,649

from the medium of saying all their bad

550

00:23:36,139 --> 00:23:33,269

we've said look here's a better option

551  
00:23:37,700 --> 00:23:36,149  
talk to us so these are very preliminary

552  
00:23:39,169 --> 00:23:37,710  
results and we're hoping to do more

553  
00:23:42,110 --> 00:23:39,179  
analysis and we're hoping to publish

554  
00:23:44,029 --> 00:23:42,120  
this as a paper if we can in the future

555  
00:23:45,320 --> 00:23:44,039  
but we're very proud to have presented

556  
00:23:48,249 --> 00:23:45,330  
it at a scientific peer-reviewed

557  
00:23:51,379 --> 00:23:48,259  
conference and we think that overall

558  
00:23:54,139 --> 00:23:51,389  
it's resulted in there in reducing their

559  
00:23:56,149 --> 00:23:54,149  
ability to spread misinformation and in

560  
00:23:58,190 --> 00:23:56,159  
a period where the Internet is so

561  
00:24:01,580 --> 00:23:58,200  
important in people's health decisions

562  
00:24:04,460 --> 00:24:01,590  
where people search for diagnosis online

563  
00:24:07,190 --> 00:24:04,470

and the ABA and comes up as the number

564

00:24:09,440 --> 00:24:07,200

one hit on Google we need to make people

565

00:24:11,960 --> 00:24:09,450

aware that what they say is not accurate

566

00:24:14,990 --> 00:24:11,970

and is not based on science if you got

567

00:24:17,060 --> 00:24:15,000

this month's skeptic which is the one

568

00:24:19,759 --> 00:24:17,070

Tim showed earlier there is a letter in

569

00:24:22,789 --> 00:24:19,769

there from Ken MacLeod who is sort of

570

00:24:24,379 --> 00:24:22,799

the grandpa of si bien and he lists some

571

00:24:26,960 --> 00:24:24,389

of the things that we have achieved

572

00:24:30,019 --> 00:24:26,970

since 2009 it goes into more detail than

573

00:24:32,360 --> 00:24:30,029

what I have today but he now he mentions

574

00:24:34,490 --> 00:24:32,370

that the avian and the ex-presidents

575

00:24:39,789 --> 00:24:34,500

fame is now infamous and its fortunes

576  
00:24:42,680 --> 00:24:39,799  
are spent we've also done things where

577  
00:24:44,419 --> 00:24:42,690  
the Australian College of Midwives they

578  
00:24:47,690 --> 00:24:44,429  
have a textbook and they actually listed

579  
00:24:49,549 --> 00:24:47,700  
in their vaccinations section a link to

580  
00:24:51,049 --> 00:24:49,559  
the avians website for people who are

581  
00:24:53,720 --> 00:24:51,059  
studying nursing to go and find more

582  
00:24:55,490 --> 00:24:53,730  
information now one of our members was I

583  
00:24:57,769 --> 00:24:55,500  
don't know what she was doing on a

584  
00:24:59,299 --> 00:24:57,779  
saturday night Joanne venom ooh but she

585  
00:25:02,209 --> 00:24:59,309  
is reading this textbook and she found

586  
00:25:04,129 --> 00:25:02,219  
this link and she got it removed may be

587  
00:25:06,529 --> 00:25:04,139  
a small thing but potentially could be

588  
00:25:08,359 --> 00:25:06,539

exposed to many many people in addition

589

00:25:10,549 --> 00:25:08,369

there are many chiropractors who are

590

00:25:12,709 --> 00:25:10,559

anti-vaccine and many of them refer

591

00:25:14,749 --> 00:25:12,719

their patients or many of themselves

592

00:25:18,830 --> 00:25:14,759

were professional members of the avian

593

00:25:20,779 --> 00:25:18,840

and constant campaigning bias resulted

594

00:25:22,849 --> 00:25:20,789

in the chiropractic board issuing a

595

00:25:24,859 --> 00:25:22,859

warning to chiropractors that they were

596

00:25:25,849 --> 00:25:24,869

not to use anti-vaccine material and

597

00:25:28,430 --> 00:25:25,859

they were not to tell their patients

598

00:25:29,839 --> 00:25:28,440

about it anymore also some of you may

599

00:25:31,430 --> 00:25:29,849

know that the healthcare Complaints

600

00:25:35,359 --> 00:25:31,440

Commission now has extra powers to

601  
00:25:38,479 --> 00:25:35,369  
investigate dodgy kind of health claims

602  
00:25:40,700 --> 00:25:38,489  
this change in legislation resulted

603  
00:25:42,019 --> 00:25:40,710  
because the avian took the healthcare

604  
00:25:45,079 --> 00:25:42,029  
Complaints Commission to the Supreme

605  
00:25:46,070 --> 00:25:45,089  
Court a number of years ago and lost so

606  
00:25:49,039 --> 00:25:46,080  
there's a lot of things that have

607  
00:25:51,469 --> 00:25:49,049  
happened so I just wanted to finish with

608  
00:25:55,159 --> 00:25:51,479  
a quote from the ex-president of the

609  
00:25:57,379 --> 00:25:55,169  
avian because although they tend them to

610  
00:25:59,570 --> 00:25:57,389  
hate science they hate doctors they hate

611  
00:26:02,450 --> 00:25:59,580  
science but they they like it when it

612  
00:26:05,629 --> 00:26:02,460  
suits them so this is a quote I think

613  
00:26:07,549 --> 00:26:05,639

from 2010 where they were talking about

614

00:26:09,409 --> 00:26:07,559

how they wanted to do a study comparing

615

00:26:11,209 --> 00:26:09,419

vaccinated and unvaccinated children

616

00:26:13,219 --> 00:26:11,219

because they insist that unvaccinated

617

00:26:16,190 --> 00:26:13,229

children are going to be healthier have

618

00:26:18,139 --> 00:26:16,200

less allergies in fact these studies

619

00:26:21,169 --> 00:26:18,149

have been done and really the only

620

00:26:23,329 --> 00:26:21,179

difference is unvaccinated kids get more

621

00:26:25,279 --> 00:26:23,339

vaccine-preventable diseases that's it I

622

00:26:28,339 --> 00:26:25,289

mean you know that's what you'd expect

623

00:26:30,829 --> 00:26:28,349

right but they were really really

624

00:26:33,049 --> 00:26:30,839

annoyed that we presented this poster it

625

00:26:35,749 --> 00:26:33,059

was like it was their Achilles heel and

626

00:26:37,369 --> 00:26:35,759

it reminded me of this quote from there

627

00:26:39,409 --> 00:26:37,379

ex-president some years ago talking

628

00:26:41,719 --> 00:26:39,419

about how they tried to publish once in

629

00:26:43,999 --> 00:26:41,729

the medical journal of Australia they

630

00:26:45,709 --> 00:26:44,009

apparently did a survey of their members

631

00:26:48,049 --> 00:26:45,719

and they asked them about whether their

632

00:26:51,019 --> 00:26:48,059

kids had more allergies had more asthma

633

00:26:53,029 --> 00:26:51,029

got sicker more often but you know what

634

00:27:00,889 --> 00:26:53,039

and they even had a special computer

635

00:27:02,959 --> 00:27:00,899

program and a scientist and even though

636

00:27:04,729 --> 00:27:02,969

they had a special computer program and

637

00:27:07,159 --> 00:27:04,739

a scientist the Medical Journal of

638

00:27:08,960 --> 00:27:07,169

Australia wouldn't publish it so what I

639

00:27:10,639 --> 00:27:08,970

don't know I wonder if this is kind of

640

00:27:11,460 --> 00:27:10,649

the special computer program they had

641

00:27:15,029 --> 00:27:11,470

not

642

00:27:16,860 --> 00:27:15,039

sure but I think in light of the fact

643

00:27:19,830 --> 00:27:16,870

that you know this is the kind of

644

00:27:22,289 --> 00:27:19,840

language that resulted in us publishing

645

00:27:24,450 --> 00:27:22,299

science through the Public Health

646

00:27:26,909 --> 00:27:24,460

Association of Australia so I think

647

00:27:29,970 --> 00:27:26,919

we've really found their Achilles heel

648

00:27:31,799 --> 00:27:29,980

in terms of I mean they already despise

649

00:27:34,740 --> 00:27:31,809

us but they can't get into the

650

00:27:37,169 --> 00:27:34,750

peer-reviewed literature but we can so i

651  
00:27:39,810 --> 00:27:37,179  
think in case you weren't listening or

652  
00:27:42,210 --> 00:27:39,820  
if you fell asleep too long didn't read

653  
00:27:45,060 --> 00:27:42,220  
their feels are hurt so i mentioned at

654  
00:27:47,430 --> 00:27:45,070  
the beginning that um the ex-president

655  
00:27:49,080 --> 00:27:47,440  
talks about how they should they deserve

656  
00:27:51,750 --> 00:27:49,090  
respect and there should be a respectful

657  
00:27:54,539 --> 00:27:51,760  
discussion between people even though

658  
00:27:56,430 --> 00:27:54,549  
it's an emotive topic there is something

659  
00:27:58,260 --> 00:27:56,440  
wrong when people have to rely on

660  
00:28:00,529 --> 00:27:58,270  
name-calling to try and prove their

661  
00:28:02,700 --> 00:28:00,539  
point well I don't know what that was

662  
00:28:05,250 --> 00:28:02,710  
these are some of the things that she's

663  
00:28:08,100 --> 00:28:05,260

called doctors throughout the course of

664

00:28:12,390 --> 00:28:08,110

us monitoring what she says on social

665

00:28:15,149 --> 00:28:12,400

media this one vaccination is rape with

666

00:28:18,000 --> 00:28:15,159

full penetration was one of the things

667

00:28:19,500 --> 00:28:18,010

that she said and here she says I'm not

668

00:28:21,620 --> 00:28:19,510

the one who does the bullying why don't

669

00:28:24,659 --> 00:28:21,630

you ask Si bien to treat me with respect

670

00:28:27,960 --> 00:28:24,669

well you know what here is what I reckon

671

00:28:30,029 --> 00:28:27,970

the avn should do publish in the

672

00:28:32,909 --> 00:28:30,039

peer-reviewed literature go to a

673

00:28:36,360 --> 00:28:32,919

conference like we did present a poster

674

00:28:38,610 --> 00:28:36,370

and then like all science we can argue

675

00:28:40,950 --> 00:28:38,620

the facts of vaccination within the

676  
00:28:44,340 --> 00:28:40,960  
pages of peer review how's that sound

677  
00:28:45,390 --> 00:28:44,350  
they could close I say that because I

678  
00:28:46,649 --> 00:28:45,400  
don't think they're ever going to get

679  
00:28:48,960 --> 00:28:46,659  
into the peer-reviewed literature but

680  
00:28:52,440 --> 00:28:48,970  
you know what they've spent 20 years

681  
00:28:55,020 --> 00:28:52,450  
doing research apparently in 20 years my

682  
00:28:59,549 --> 00:28:55,030  
degree is only took me eight how long

683  
00:29:01,620 --> 00:28:59,559  
did yours take an probably 20 but in any

684  
00:29:02,940 --> 00:29:01,630  
case they could go to university and

685  
00:29:06,120 --> 00:29:02,950  
they could have got a degree and they

686  
00:29:08,100 --> 00:29:06,130  
can publish like we did this work was

687  
00:29:09,870 --> 00:29:08,110  
undertaken by volunteers there's a lot

688  
00:29:11,970 --> 00:29:09,880

of people that were involved not just

689

00:29:13,710 --> 00:29:11,980

the people that are named Tracy is the

690

00:29:16,890 --> 00:29:13,720

first author I'm presenting it tonight

691

00:29:19,169 --> 00:29:16,900

on her behalf and is also involved many

692

00:29:35,590 --> 00:29:19,179

other people helped out we can be found

693

00:29:41,870 --> 00:29:38,450

our friends at the canberra skeptics at

694

00:29:42,710 --> 00:29:41,880

canberra skeptics organ a you tell us

695

00:29:45,200 --> 00:29:42,720

that they've got some interesting

696

00:29:48,080 --> 00:29:45,210

upcoming events nordenskjold and

697

00:29:50,150 --> 00:29:48,090

Shackleton early and Arctic exploration

698

00:29:52,730 --> 00:29:50,160

for science this is going to be on

699

00:29:56,990 --> 00:29:52,740

thursday the twenty first of august six

700

00:29:59,480 --> 00:29:57,000

pm to 730 p.m. where Japan theatre

701  
00:30:02,240 --> 00:29:59,490  
Questacon the early history of Antarctic

702  
00:30:05,330 --> 00:30:02,250  
exploration was all in the name of

703  
00:30:07,190 --> 00:30:05,340  
science but dr. Paul Willis oh he's from

704  
00:30:09,169 --> 00:30:07,200  
the Royal Institution of Australia has

705  
00:30:13,690 --> 00:30:09,179  
been to the Antarctica eight times eight

706  
00:30:16,040 --> 00:30:13,700  
times what why doesn't the invite me

707  
00:30:19,370 --> 00:30:16,050  
following in the footsteps of the two

708  
00:30:21,530 --> 00:30:19,380  
early Arctic explorers one a household

709  
00:30:25,100 --> 00:30:21,540  
name the other almost completely unknown

710  
00:30:28,010 --> 00:30:25,110  
in this dog dr. Paul Willis will take

711  
00:30:30,140 --> 00:30:28,020  
you to the frozen continent and recreate

712  
00:30:32,240 --> 00:30:30,150  
to epic voyages of scientific discovery

713  
00:30:34,520 --> 00:30:32,250

all that sounds like a good talk folks

714

00:30:36,680 --> 00:30:34,530

if you're in Canberra i think i can

715

00:30:40,549 --> 00:30:36,690

really recommend that talk poor willis

716

00:30:42,590 --> 00:30:40,559

and arctica eight times hmm if you go

717

00:30:44,810 --> 00:30:42,600

ask him about the plesiosaur he found

718

00:30:47,860 --> 00:30:44,820

once Canberra skeptics also have on the

719

00:30:50,450 --> 00:30:47,870

twenty-second of August our trivia night

720

00:30:54,110 --> 00:30:50,460

Canberra skeptics science trivia night

721

00:30:55,460 --> 00:30:54,120

at King O'Malley's that's a pub right in

722

00:30:59,299 --> 00:30:55,470

the middle of Canberra for more

723

00:31:08,990 --> 00:30:59,309

information ww Canberra skeptic saw a

724

00:31:17,910 --> 00:31:13,890

this is the cosmos a network of a

725

00:31:23,880 --> 00:31:17,920

hundred billion galaxies and it's the

726  
00:31:28,870 --> 00:31:26,110  
congratulations to Adrienne Morgan the

727  
00:31:30,760 --> 00:31:28,880  
winner of the cosmos DVD pack the

728  
00:31:33,160 --> 00:31:30,770  
billions and billions photograph

729  
00:31:35,560 --> 00:31:33,170  
competition you can view Adrian's

730  
00:31:38,410 --> 00:31:35,570  
winning photograph based on the billions

731  
00:31:41,950 --> 00:31:38,420  
and billions idea via visiting the

732  
00:31:44,290 --> 00:31:41,960  
skeptical zone Facebook page as Adrian

733  
00:31:46,270 --> 00:31:44,300  
says his picture is a pair of equations

734  
00:31:49,210 --> 00:31:46,280  
one horizontal the other vertical like a

735  
00:31:51,700 --> 00:31:49,220  
crossword physical objects stand-in for

736  
00:31:54,730 --> 00:31:51,710  
quantities the first equation reads

737  
00:31:58,090 --> 00:31:54,740  
hundreds by thousands cubed is less than

738  
00:31:59,860 --> 00:31:58,100

icing sugar hmmm if hundreds and

739

00:32:01,510 --> 00:31:59,870

thousands the famous confectionary are

740

00:32:03,760 --> 00:32:01,520

called hundreds and thousands then icing

741

00:32:06,370 --> 00:32:03,770

sugar could be very reasonably called

742

00:32:08,740 --> 00:32:06,380

billions and billions in fact I

743

00:32:10,480 --> 00:32:08,750

calculate that just one milliliter of

744

00:32:14,950 --> 00:32:10,490

icing sugar contains more than 10

745

00:32:18,100 --> 00:32:14,960

billion grains Adrian I'm sure you're

746

00:32:21,220 --> 00:32:18,110

right congratulations your cosmos DVD

747

00:32:36,299 --> 00:32:21,230

pack the complete new series is on the

748

00:32:41,379 --> 00:32:39,039

welcome to a weakened science from ra oz

749

00:32:44,200 --> 00:32:41,389

bring you the science you need to know

750

00:32:46,600 --> 00:32:44,210

where did the earth come from the Big

751  
00:32:54,609 --> 00:32:46,610  
Bang some divine intervention or the

752  
00:32:56,560 --> 00:32:54,619  
rack nos maybe let's go right back to

753  
00:32:59,470 --> 00:32:56,570  
the Big Bang the start of the universe

754  
00:33:01,600 --> 00:32:59,480  
after the Big Bang the universe mostly

755  
00:33:03,989 --> 00:33:01,610  
consisted of two forms of the lightest

756  
00:33:06,419 --> 00:33:03,999  
elements which are hydrogen and helium

757  
00:33:09,159 --> 00:33:06,429  
some of these started clumping together

758  
00:33:11,470 --> 00:33:09,169  
creating heavier masses which attracted

759  
00:33:13,389 --> 00:33:11,480  
more and more particles in words as they

760  
00:33:15,460 --> 00:33:13,399  
clump together they start some nuclear

761  
00:33:18,220 --> 00:33:15,470  
fusion which releases energy and

762  
00:33:19,960 --> 00:33:18,230  
resulted in them forming stars and right

763  
00:33:22,149 --> 00:33:19,970

in the center of these stars where

764

00:33:24,159 --> 00:33:22,159

fusion was occurring heavier elements

765

00:33:26,769 --> 00:33:24,169

such as carbon and iron formed

766

00:33:28,749 --> 00:33:26,779

eventually some of these stars exploded

767

00:33:31,330 --> 00:33:28,759

in a supernova flinging themselves

768

00:33:33,310 --> 00:33:31,340

throughout the universe and restarting

769

00:33:35,379 --> 00:33:33,320

this process of star formation and

770

00:33:40,600 --> 00:33:35,389

building more and more heavy elements

771

00:33:42,580 --> 00:33:40,610

one of these stars is our sun after a

772

00:33:44,350 --> 00:33:42,590

formed the Sun's gravity started

773

00:33:46,330 --> 00:33:44,360

collecting rocky debris into a disk

774

00:33:48,609 --> 00:33:46,340

called a nebula with some of the

775

00:33:50,859 --> 00:33:48,619

colliding and combining to form larger

776

00:33:52,840 --> 00:33:50,869

bodies with these larger bodies came

777

00:33:55,480 --> 00:33:52,850

stronger gravity collecting more and

778

00:33:57,129 --> 00:33:55,490

more pieces together this process and

779

00:33:58,840 --> 00:33:57,139

collecting bits together and combining

780

00:34:01,090 --> 00:33:58,850

them into a larger body is called a

781

00:34:02,830 --> 00:34:01,100

chrétien radioactive decay and heats

782

00:34:05,440 --> 00:34:02,840

from these collisions cause the young

783

00:34:07,210 --> 00:34:05,450

earth to be molten but after a while the

784

00:34:10,270 --> 00:34:07,220

outer surface eventually cooled and

785

00:34:12,849 --> 00:34:10,280

became the crust the molten earth still

786

00:34:15,430 --> 00:34:12,859

exists under the crust today as mantle

787

00:34:17,409 --> 00:34:15,440

so the Big Bang didn't directly create

788

00:34:19,869 --> 00:34:17,419

the earth but did lead to a process

789

00:34:24,180 --> 00:34:19,879

which results in its formation and now

790

00:34:27,010 --> 00:34:24,190

for fast facts about planetary formation

791

00:34:29,050 --> 00:34:27,020

the process of creating the earth took a

792

00:34:31,330 --> 00:34:29,060

really long time it is thought the earth

793

00:34:34,000 --> 00:34:31,340

has only existed for third of the time

794

00:34:36,400 --> 00:34:34,010

since the Big Bang during its early life

795

00:34:38,380 --> 00:34:36,410

the Sun created solar winds which pushed

796

00:34:40,150 --> 00:34:38,390

gas molecules to the outer regions of

797

00:34:42,070 --> 00:34:40,160

the solar system what was left behind

798

00:34:44,830 --> 00:34:42,080

were the rock clumps which went on to

799

00:34:46,570 --> 00:34:44,840

form the earth and other planets the

800

00:34:48,220 --> 00:34:46,580

moon is thought to be made up of bits of

801  
00:34:51,100 --> 00:34:48,230  
Earth which broken off during a

802  
00:34:52,930 --> 00:34:51,110  
collision with a large body these bits

803  
00:34:55,360 --> 00:34:52,940  
eventually clump together to form a

804  
00:34:57,820 --> 00:34:55,370  
single moon and I mentioned that the

805  
00:34:59,980 --> 00:34:57,830  
earth formed out of rock clumps so water

806  
00:35:03,070 --> 00:34:59,990  
on Earth was most likely introduced by

807  
00:35:05,020 --> 00:35:03,080  
impacts from icy meteorites that's it

808  
00:35:06,490 --> 00:35:05,030  
for this week in science for more

809  
00:35:11,160 --> 00:35:06,500  
information on the formation of planets

810  
00:35:13,570 --> 00:35:11,170  
go to the are ales website RI aus ok you

811  
00:35:16,360 --> 00:35:13,580  
follow us on twitter at our hours and

812  
00:35:31,670 --> 00:35:16,370  
like us on facebook i'm ben lewis and

813  
00:35:35,610 --> 00:35:33,870

do you want to get in touch with nature

814

00:35:37,350 --> 00:35:35,620

without the fallacies come along to

815

00:35:39,780 --> 00:35:37,360

camping skeptically organized by the

816

00:35:41,400 --> 00:35:39,790

Brisbane skeptics Society spend two

817

00:35:43,470 --> 00:35:41,410

nights at the tool borough chalet in the

818

00:35:45,240 --> 00:35:43,480

picturesque vanya mountain enjoy the

819

00:35:47,370 --> 00:35:45,250

company of fellow skeptic to push walks

820

00:35:49,560 --> 00:35:47,380

barbecues and pseudoscience movie night

821

00:35:51,420 --> 00:35:49,570

along with a few drinks it's only sixty

822

00:35:54,090 --> 00:35:51,430

dollars for two nights September 12 to

823

00:35:55,800 --> 00:35:54,100

the 14th places are strictly limited so

824

00:36:15,440 --> 00:35:55,810

go to Brisbane skeptics Todd org for

825

00:36:21,330 --> 00:36:18,300

the following appeared in sunshine coast

826  
00:36:24,360 --> 00:36:21,340  
daily newspaper August thirteenth 2014

827  
00:36:26,370 --> 00:36:24,370  
by Kathy sundström appalling vaccination

828  
00:36:28,500 --> 00:36:26,380  
rates on the Sunshine Coast have sparked

829  
00:36:30,920 --> 00:36:28,510  
the need for a beaming new immunization

830  
00:36:33,540 --> 00:36:30,930  
billboard along the Bruce Highway

831  
00:36:35,400 --> 00:36:33,550  
Sunshine Coast Medicare local has

832  
00:36:38,070 --> 00:36:35,410  
launched its immunization billboard

833  
00:36:39,600 --> 00:36:38,080  
campaign starting in palmview as a

834  
00:36:41,640 --> 00:36:39,610  
result of the region having the highest

835  
00:36:44,700 --> 00:36:41,650  
number of conscientious objectors to

836  
00:36:47,310 --> 00:36:44,710  
immunization in the country nationals

837  
00:36:48,870 --> 00:36:47,320  
are on immunization rates show there are

838  
00:36:51,030 --> 00:36:48,880

six hundred and sixty children in the

839

00:36:52,980 --> 00:36:51,040

region with a registered conscientious

840

00:36:55,410 --> 00:36:52,990

objection next to their name bringing

841

00:36:57,570 --> 00:36:55,420

the figure to 7.1 percent the highest in

842

00:37:01,410 --> 00:36:57,580

the country but this number is less than

843

00:37:03,770 --> 00:37:01,420

half of the region's 1419 children who

844

00:37:06,900 --> 00:37:03,780

records show are not fully immunized

845

00:37:08,970 --> 00:37:06,910

lands bridge-ep Peter Dobson warn that

846

00:37:10,710 --> 00:37:08,980

without herd immunity more people were

847

00:37:14,280 --> 00:37:10,720

at risk of falling ill to largely

848

00:37:16,910 --> 00:37:14,290

preventable diseases quote complacency

849

00:37:20,520 --> 00:37:16,920

is set in and quote dr. Dobson said

850

00:37:22,080 --> 00:37:20,530

quote people don't see the diseases so

851  
00:37:24,450 --> 00:37:22,090  
they questioned why their child should

852  
00:37:26,250 --> 00:37:24,460  
get the needles but this complacency can

853  
00:37:29,640 --> 00:37:26,260  
lead to a rise in diseases like whooping

854  
00:37:32,120 --> 00:37:29,650  
cough and quote nutritionist and author

855  
00:37:35,310 --> 00:37:32,130  
Cindy O'Meara who lives in mooloolaba

856  
00:37:37,140 --> 00:37:35,320  
doubted the campaign would work she

857  
00:37:40,140 --> 00:37:37,150  
believes vaccination rates are dropping

858  
00:37:42,170 --> 00:37:40,150  
because quote more people are becoming

859  
00:37:45,980 --> 00:37:42,180  
educated about the dangers

860  
00:37:48,530 --> 00:37:45,990  
vaccines end quote mezzo Mira has never

861  
00:37:50,810 --> 00:37:48,540  
had a vaccine in her life and hasn't had

862  
00:37:54,320 --> 00:37:50,820  
an antibiotic or a painkiller and need

863  
00:37:56,270 --> 00:37:54,330

to have her children quote people are

864

00:37:58,700 --> 00:37:56,280

beginning to question immunizations and

865

00:38:02,120 --> 00:37:58,710

the amount we are having end quote she

866

00:38:03,890 --> 00:38:02,130

said quote maybe they're not as safe as

867

00:38:05,690 --> 00:38:03,900

we've been told and they are no longer

868

00:38:08,120 --> 00:38:05,700

sure if they should sacrifice their

869

00:38:11,330 --> 00:38:08,130

child for the greater good social media

870

00:38:13,310 --> 00:38:11,340

is telling us the truth now a mother put

871

00:38:15,620 --> 00:38:13,320

up our daughter went to get her cervical

872

00:38:19,310 --> 00:38:15,630

cancer vaccine and three hours later she

873

00:38:21,620 --> 00:38:19,320

is dead end quote she said she wasn't

874

00:38:24,680 --> 00:38:21,630

against the quote philosophy behind

875

00:38:29,690 --> 00:38:24,690

vaccines and quote but did question

876

00:38:31,400 --> 00:38:29,700

quote dubious ingredients end quote dr.

877

00:38:33,530 --> 00:38:31,410

Dobson stressed the overwhelming

878

00:38:36,890 --> 00:38:33,540

research worldwide back to the benefits

879

00:38:39,170 --> 00:38:36,900

of vaccines quote you're a thousand

880

00:38:43,340 --> 00:38:39,180

times safer from diseases when given

881

00:38:45,260 --> 00:38:43,350

vaccines end quote he said quote this is

882

00:38:47,930 --> 00:38:45,270

been shown over many years and many

883

00:38:50,000 --> 00:38:47,940

examples people don't want to listen to

884

00:38:52,010 --> 00:38:50,010

this they want to throw up one example

885

00:38:54,230 --> 00:38:52,020

of a child screaming as a rare side

886

00:38:55,970 --> 00:38:54,240

effect to a vaccine they don't see the

887

00:38:58,370 --> 00:38:55,980

numbers of cases as we did many years

888

00:39:06,120 --> 00:38:58,380

ago of children dying from whooping

889

00:39:11,770 --> 00:39:08,620

after this story was published of course

890

00:39:15,580 --> 00:39:11,780

many young concerned people wrote to the

891

00:39:17,170 --> 00:39:15,590

editor of the sunshine coast daily Heidi

892

00:39:19,570 --> 00:39:17,180

Robinson from the Northern Rivers

893

00:39:21,820 --> 00:39:19,580

vaccination supporters a group received

894

00:39:24,310 --> 00:39:21,830

this response thank you for your letter

895

00:39:26,560 --> 00:39:24,320

as you are no doubt well aware there are

896

00:39:28,690 --> 00:39:26,570

two very distinct points of view on the

897

00:39:31,630 --> 00:39:28,700

immunization debate and the daily as a

898

00:39:34,180 --> 00:39:31,640

newspaper tries to present points of

899

00:39:35,650 --> 00:39:34,190

view from both sides while I have

900

00:39:39,310 --> 00:39:35,660

received several complaints about the

901  
00:39:42,340 --> 00:39:39,320  
inclusion of ms O'Meara's views in the

902  
00:39:44,830 --> 00:39:42,350  
article i have received at least as many

903  
00:39:48,640 --> 00:39:44,840  
complaints that it was biased towards

904  
00:39:51,040 --> 00:39:48,650  
the pro immunization camp all the daily

905  
00:39:53,020 --> 00:39:51,050  
and the meteor in general can do is

906  
00:39:55,660 --> 00:39:53,030  
present both sides of the debate as

907  
00:39:57,970 --> 00:39:55,670  
impartially as possible when we are

908  
00:40:00,940 --> 00:39:57,980  
receiving complaints from both sides it

909  
00:40:03,520 --> 00:40:00,950  
suggests to me that we are doing a

910  
00:40:06,960 --> 00:40:03,530  
pretty good job of walking the fine line

911  
00:40:09,400 --> 00:40:06,970  
down the middle as to ms O'Meara's quote

912  
00:40:12,100 --> 00:40:09,410  
qualifications end quote she is a

913  
00:40:14,680 --> 00:40:12,110

well-known Sunshine Coast nutritionist

914

00:40:17,470 --> 00:40:14,690

with a high profile in the area and a

915

00:40:19,510 --> 00:40:17,480

strong point of view on immunization she

916

00:40:23,560 --> 00:40:19,520

has never pretended to be any more than

917

00:40:29,530 --> 00:40:23,570

that regards Damien Battersby acting

918

00:40:34,490 --> 00:40:32,060

this is Ross bulge from the Brisbane

919

00:40:36,710 --> 00:40:34,500

skeptics society in response to the

920

00:40:38,390 --> 00:40:36,720

sunshine coast daily article in which a

921

00:40:40,490 --> 00:40:38,400

nutritionist who expressed some

922

00:40:44,150 --> 00:40:40,500

anti-vaccine sentiments was featured I

923

00:40:46,430 --> 00:40:44,160

wrote an open letter dear mr. Damien

924

00:40:48,050 --> 00:40:46,440

bothers be I wanted to discuss some

925

00:40:49,790 --> 00:40:48,060

concerns i had about an article that

926  
00:40:52,190 --> 00:40:49,800  
appeared in the sunshine coast daily on

927  
00:40:55,220 --> 00:40:52,200  
August thirteenth low vaccination rates

928  
00:40:57,080 --> 00:40:55,230  
sparks new campaign first I would like

929  
00:40:58,760 --> 00:40:57,090  
to commend the sunshine coast daily for

930  
00:41:00,890 --> 00:40:58,770  
bringing attention to the important

931  
00:41:02,870 --> 00:41:00,900  
issue of vaccination uptake as well as

932  
00:41:04,340 --> 00:41:02,880  
the benefits of vaccination it is

933  
00:41:06,170 --> 00:41:04,350  
crucial for the future health of our

934  
00:41:08,350 --> 00:41:06,180  
children and indeed ourselves that the

935  
00:41:11,270 --> 00:41:08,360  
general population continue to vaccinate

936  
00:41:12,680 --> 00:41:11,280  
that being said I have some significant

937  
00:41:14,270 --> 00:41:12,690  
concerns about the content of the

938  
00:41:16,280 --> 00:41:14,280

article that I feel need to be addressed

939

00:41:19,520 --> 00:41:16,290

urgently and should be considered for

940

00:41:21,110 --> 00:41:19,530

future articles I'm sure by now that you

941

00:41:23,330 --> 00:41:21,120

are aware of the idea of false balance

942

00:41:25,220 --> 00:41:23,340

in the media the term refers to

943

00:41:27,080 --> 00:41:25,230

instances in which the media attempts to

944

00:41:29,480 --> 00:41:27,090

present two sides of a particular issue

945

00:41:32,600 --> 00:41:29,490

in the name of fans and balance where in

946

00:41:34,220 --> 00:41:32,610

reality there is no controversy there is

947

00:41:36,500 --> 00:41:34,230

one established position for which there

948

00:41:39,170 --> 00:41:36,510

is overwhelming scientific support and a

949

00:41:41,030 --> 00:41:39,180

fringe denial element many issues

950

00:41:43,640 --> 00:41:41,040

covered by the media are subjective and

951  
00:41:45,320 --> 00:41:43,650  
fall on a grey line whether or not a new

952  
00:41:47,240 --> 00:41:45,330  
large supermarket should be built in a

953  
00:41:48,980 --> 00:41:47,250  
quiet country town or whether people

954  
00:41:50,690 --> 00:41:48,990  
receiving government welfare should work

955  
00:41:52,790 --> 00:41:50,700  
for their payments are issues for which

956  
00:41:55,340 --> 00:41:52,800  
there are obvious pros and cons and need

957  
00:41:57,920 --> 00:41:55,350  
careful discussion topics in science

958  
00:41:59,510 --> 00:41:57,930  
however are rarely so grey sciences are

959  
00:42:01,910 --> 00:41:59,520  
disciplined based on empirical evidence

960  
00:42:03,770 --> 00:42:01,920  
a self-correcting process that leads to

961  
00:42:06,320 --> 00:42:03,780  
firm and definitive conclusions over

962  
00:42:08,240 --> 00:42:06,330  
time these conclusions are reached by

963  
00:42:10,700 --> 00:42:08,250

the consensus of experts in any given

964

00:42:14,410 --> 00:42:10,710

field after careful evaluation of the

965

00:42:16,910 --> 00:42:14,420

evidence immunization is a mature field

966

00:42:19,550 --> 00:42:16,920

vaccines have been a mainstay of Public

967

00:42:21,410 --> 00:42:19,560

Health for over 100 years the safety of

968

00:42:23,480 --> 00:42:21,420

vaccines is well established and it is

969

00:42:25,520 --> 00:42:23,490

not controversial amongst those that are

970

00:42:27,400 --> 00:42:25,530

scientifically literate not to mention

971

00:42:30,020 --> 00:42:27,410

immunologists virologists and

972

00:42:32,030 --> 00:42:30,030

microbiologists to say the vaccine

973

00:42:33,560 --> 00:42:32,040

denial and vaccine danger proponents or

974

00:42:35,780 --> 00:42:33,570

a fringe minority is a huge

975

00:42:37,820 --> 00:42:35,790

understatement proponents of such

976  
00:42:40,100 --> 00:42:37,830  
theories have no scientific evidence on

977  
00:42:40,839 --> 00:42:40,110  
their side in fact they are frequently

978  
00:42:42,729 --> 00:42:40,849  
found to dis

979  
00:42:44,710 --> 00:42:42,739  
and sometimes lie about a variety of

980  
00:42:48,519 --> 00:42:44,720  
factors associated with vaccine efficacy

981  
00:42:50,469 --> 00:42:48,529  
and safety imagine then my dismay when I

982  
00:42:52,930 --> 00:42:50,479  
read the above-mentioned article to find

983  
00:42:54,460 --> 00:42:52,940  
the quote of Cindy O'Meara it is

984  
00:42:56,259 --> 00:42:54,470  
questionable whether nutritionists are

985  
00:42:58,539 --> 00:42:56,269  
adequately qualified in their own field

986  
00:43:00,849 --> 00:42:58,549  
compared to say a dietitian a regulated

987  
00:43:03,819 --> 00:43:00,859  
title let alone even remotely qualified

988  
00:43:05,920 --> 00:43:03,829

in the area of immunology as such the

989

00:43:08,349 --> 00:43:05,930

opinions of mizzou Meera have absolutely

990

00:43:10,630 --> 00:43:08,359

no place in an article about vaccination

991

00:43:12,609 --> 00:43:10,640

she states people are beginning to

992

00:43:14,769 --> 00:43:12,619

question immunizations and the amount we

993

00:43:16,479 --> 00:43:14,779

are having it should be noted that the

994

00:43:18,640 --> 00:43:16,489

only reason this statement is true is

995

00:43:20,950 --> 00:43:18,650

because people such as herself spread

996

00:43:22,539 --> 00:43:20,960

misinformation about immunization not

997

00:43:24,759 --> 00:43:22,549

because of any legitimate concerns by

998

00:43:26,979 --> 00:43:24,769

experts in the field of immunology she

999

00:43:29,019 --> 00:43:26,989

continues maybe they are not as safe as

1000

00:43:30,700 --> 00:43:29,029

we have been told and they are no longer

1001

00:43:32,890 --> 00:43:30,710

sure if they should sacrifice their

1002

00:43:35,710 --> 00:43:32,900

child for the greater good social media

1003

00:43:37,599 --> 00:43:35,720

is telling us the truth now she has no

1004

00:43:40,059 --> 00:43:37,609

expertise in which to speculate about

1005

00:43:42,609 --> 00:43:40,069

the safety of vaccines further by

1006

00:43:44,529 --> 00:43:42,619

stating as we have been told is implying

1007

00:43:47,109 --> 00:43:44,539

some kind of conspiracy that frankly

1008

00:43:49,059 --> 00:43:47,119

just doesn't exist the word sacrifice is

1009

00:43:51,039 --> 00:43:49,069

an emotionally loaded term that has

1010

00:43:53,049 --> 00:43:51,049

absolutely no relevance to what happens

1011

00:43:54,519 --> 00:43:53,059

during the vaccination program in which

1012

00:43:56,499 --> 00:43:54,529

less than one in a thousand children

1013

00:43:59,140 --> 00:43:56,509

suffer side effects and even less

1014

00:44:01,209 --> 00:43:59,150

serious adverse events to suggest that

1015

00:44:03,579 --> 00:44:01,219

social media is an appropriate source of

1016

00:44:04,799 --> 00:44:03,589

medical information is absurd given the

1017

00:44:08,289 --> 00:44:04,809

dangerous amount of misinformation

1018

00:44:10,329 --> 00:44:08,299

propagated by such means she continues a

1019

00:44:12,400 --> 00:44:10,339

mother put up how a daughter went to get

1020

00:44:15,009 --> 00:44:12,410

her cervical cancer vaccine and three

1021

00:44:17,079 --> 00:44:15,019

hours later she is dead this statement

1022

00:44:18,729 --> 00:44:17,089

lacks detail but is likely a dangerous

1023

00:44:20,589 --> 00:44:18,739

distortion of an event in which a young

1024

00:44:22,420 --> 00:44:20,599

girl received the vaccine and was

1025

00:44:24,279 --> 00:44:22,430

subsequently in a car accident or

1026

00:44:25,319 --> 00:44:24,289

perhaps another incident in which the

1027

00:44:28,420 --> 00:44:25,329

girl who received the vaccine

1028

00:44:30,430 --> 00:44:28,430

unfortunately died from a tumor both are

1029

00:44:32,440 --> 00:44:30,440

completely unrelated to the vaccination

1030

00:44:34,329 --> 00:44:32,450

that this statement was even made in the

1031

00:44:37,180 --> 00:44:34,339

first place demonstrates the potential

1032

00:44:38,829 --> 00:44:37,190

dishonesty of ms O'Meara she continues

1033

00:44:40,599 --> 00:44:38,839

that she said that she wasn't against

1034

00:44:42,910 --> 00:44:40,609

the philosophy behind vaccines but did

1035

00:44:45,279 --> 00:44:42,920

question do bees ingredients this

1036

00:44:47,440 --> 00:44:45,289

statement is also irresponsible it is a

1037

00:44:49,390 --> 00:44:47,450

common tactic by vaccine denialists to

1038

00:44:50,979 --> 00:44:49,400

use the just asking questions gambit

1039

00:44:53,440 --> 00:44:50,989

bringing up points that have been

1040

00:44:54,670 --> 00:44:53,450

refuted over and over again by qualified

1041

00:44:56,380 --> 00:44:54,680

immunol just

1042

00:44:57,940 --> 00:44:56,390

there are no ingredients in vaccines

1043

00:45:00,010 --> 00:44:57,950

that have been considered dubious in

1044

00:45:01,960 --> 00:45:00,020

fact a great deal of research has been

1045

00:45:04,120 --> 00:45:01,970

conducted into each and every ingredient

1046

00:45:06,820 --> 00:45:04,130

contained within a vaccine for both

1047

00:45:08,350 --> 00:45:06,830

safety and effect on efficacy being

1048

00:45:10,060 --> 00:45:08,360

vague and not listing a specific

1049

00:45:11,800 --> 00:45:10,070

ingredient makes it hard for readers to

1050

00:45:14,650 --> 00:45:11,810

research specifically which ingredients

1051  
00:45:16,480 --> 00:45:14,660  
are to be considered dubious this

1052  
00:45:18,250 --> 00:45:16,490  
article has raised serious questions in

1053  
00:45:20,560 --> 00:45:18,260  
my mind as as to the process by which

1054  
00:45:22,210 --> 00:45:20,570  
journalists at your publication research

1055  
00:45:24,790 --> 00:45:22,220  
their articles and the source is quoted

1056  
00:45:26,350 --> 00:45:24,800  
in them is any attempt made to check

1057  
00:45:28,120 --> 00:45:26,360  
into whether sources are appropriately

1058  
00:45:30,340 --> 00:45:28,130  
qualified to give an opinion on the

1059  
00:45:32,260 --> 00:45:30,350  
topic in question other backgrounds of

1060  
00:45:34,720 --> 00:45:32,270  
sources checked for potential bias and

1061  
00:45:35,980 --> 00:45:34,730  
motives that may come into play this

1062  
00:45:37,720 --> 00:45:35,990  
isn't the first time in the past month

1063  
00:45:39,310 --> 00:45:37,730

that the standards of science reporting

1064

00:45:41,590 --> 00:45:39,320

in your publication have been

1065

00:45:43,930 --> 00:45:41,600

substandard an article published on the

1066

00:45:46,840 --> 00:45:43,940

first of August titled DNA computer to

1067

00:45:49,480 --> 00:45:46,850

identify Ebola contained a table titled

1068

00:45:51,160 --> 00:45:49,490

world's deadliest diseases unfortunately

1069

00:45:53,770 --> 00:45:51,170

the table contain two organisms that

1070

00:45:55,720 --> 00:45:53,780

were not viruses although this oversight

1071

00:45:58,060 --> 00:45:55,730

may seem small as an interface between

1072

00:46:00,370 --> 00:45:58,070

science in the public publications such

1073

00:46:02,440 --> 00:46:00,380

of yours have a duty to ensure accurate

1074

00:46:05,050 --> 00:46:02,450

information is presented to help prevent

1075

00:46:06,790 --> 00:46:05,060

the propagation of misinformation when

1076

00:46:09,280 --> 00:46:06,800

this misinformation takes the form of

1077

00:46:11,890 --> 00:46:09,290

important public health initiatives a la

1078

00:46:14,170 --> 00:46:11,900

ms O'Meara's comments diligence is even

1079

00:46:16,810 --> 00:46:14,180

more important I look forward to your

1080

00:46:18,580 --> 00:46:16,820

response on this matter regards Ross

1081

00:46:21,400 --> 00:46:18,590

mulch president Brisbane skeptics

1082

00:46:23,590 --> 00:46:21,410

society although I have yet to receive a

1083

00:46:25,780 --> 00:46:23,600

response to this letter the letter was

1084

00:46:41,580 --> 00:46:25,790

published as the letter of the day in

1085

00:46:45,700 --> 00:46:44,080

hey this is Jay novella from the

1086

00:46:47,620 --> 00:46:45,710

skeptics guide to the universe podcast

1087

00:46:49,480 --> 00:46:47,630

did you know that there are thousands of

1088

00:46:51,190 --> 00:46:49,490

skeptical reports interviews and

1089

00:46:53,920 --> 00:46:51,200

investigations going back to nineteen

1090

00:46:57,790 --> 00:46:53,930

eighty one free to download just visit w

1091

00:46:59,470 --> 00:46:57,800

WC MPX com a you click the publications

1092

00:47:01,210 --> 00:46:59,480

link and enjoy almost every back issue

1093

00:47:03,010 --> 00:47:01,220

of the skeptic the journal from

1094

00:47:04,540 --> 00:47:03,020

Australian skeptics you can also

1095

00:47:06,849 --> 00:47:04,550

subscribe online and get the latest

1096

00:47:08,859 --> 00:47:06,859

digital or hard copy of this the world's

1097

00:47:12,520 --> 00:47:08,869

second oldest skeptical magazine that's

1098

00:47:28,470 --> 00:47:12,530

ww skeptics com au or just google

1099

00:47:31,960 --> 00:47:30,580

thank you for listening to the skeptic

1100

00:47:34,480 --> 00:47:31,970

zone i'm still here perched up in the

1101

00:47:36,280 --> 00:47:34,490

control area there's a couple of cars

1102

00:47:39,520 --> 00:47:36,290

still out there on the track doing some

1103

00:47:41,800 --> 00:47:39,530

hot laps and things like that and it's a

1104

00:47:44,400 --> 00:47:41,810

great day for the racing enthusiasts

1105

00:47:46,750 --> 00:47:44,410

race enthusiast who likes to drive cars

1106

00:47:49,410 --> 00:47:46,760

well what more could you want to get to

1107

00:47:52,150 --> 00:47:49,420

drive a car around a racetrack and the

1108

00:47:54,940 --> 00:47:52,160

the howling wind becomes car six back

1109

00:47:57,700 --> 00:47:54,950

from the pits just coming into the pit

1110

00:47:59,020 --> 00:47:57,710

lane right now well I'm looking forward

1111

00:48:01,090 --> 00:47:59,030

in the coming weeks they're doing some

1112

00:48:03,280 --> 00:48:01,100

mystery investigators programs shows

1113

00:48:05,620 --> 00:48:03,290

once again with my good friend Ian Bryce

1114

00:48:07,450 --> 00:48:05,630

from Australian skeptics and also

1115

00:48:09,250 --> 00:48:07,460

Maynard's going to be chipping in and

1116

00:48:11,890 --> 00:48:09,260

coming on and being one of the mystery

1117

00:48:14,560 --> 00:48:11,900

investigators soon at the powerhouse

1118

00:48:15,610 --> 00:48:14,570

museum there's some shows lined up and

1119

00:48:17,740 --> 00:48:15,620

for those of you who don't know the

1120

00:48:20,230 --> 00:48:17,750

mystery investigators is a young it's a

1121

00:48:22,270 --> 00:48:20,240

performance since we explain science

1122

00:48:24,340 --> 00:48:22,280

it's more or less David students but

1123

00:48:25,960 --> 00:48:24,350

anybody can enjoy it we have a bed of

1124

00:48:27,580 --> 00:48:25,970

nails and we explain how the power

1125

00:48:29,560 --> 00:48:27,590

balance bracelets seemed to work we've

1126

00:48:31,030 --> 00:48:29,570

been some spoons and talk about

1127

00:48:33,940 --> 00:48:31,040

firewalking all sorts of interesting and

1128

00:48:38,470 --> 00:48:33,950

fun things looking forward to that but

1129

00:48:41,620 --> 00:48:38,480

for this week from the windswept colder

1130

00:48:43,570 --> 00:48:41,630

park raceway just outside of Melbourne

1131

00:48:50,320 --> 00:48:43,580

in Victoria this is Richard Saunders

1132

00:48:55,000 --> 00:48:50,330

signing off you've been listening to the

1133

00:48:58,840 --> 00:48:55,010

skeptic server visit our website at [www](http://www)