

1
00:00:05,929 --> 00:00:13,699
welcome to the skeptic zone the podcast

2
00:00:09,089 --> 00:00:13,699
from Australia for science and reason

3
00:00:22,440 --> 00:00:29,530
hello and welcome to the skeptic zone

4
00:00:25,269 --> 00:00:32,799
episode number 237 for the fourth of may

5
00:00:29,530 --> 00:00:35,980
2013 Richard Saunders here with you from

6
00:00:32,799 --> 00:00:38,709
Sydney Australia now before we get into

7
00:00:35,979 --> 00:00:40,209
what's coming up on this week's show in

8
00:00:38,710 --> 00:00:44,980
the past week it came to my attention

9
00:00:40,210 --> 00:00:49,390
that something i said are on a skeptical

10
00:00:44,979 --> 00:00:52,869
activism panel in manchester the QED con

11
00:00:49,390 --> 00:00:55,210
may have been taken the wrong way maybe

12
00:00:52,869 --> 00:00:59,409
in fact i think it was in certain

13
00:00:55,210 --> 00:01:01,890
quarters anyway i issued this statement

14
00:00:59,409 --> 00:01:05,769
a couple of days ago on facebook and

15
00:01:01,890 --> 00:01:08,170
well i'll repeat it here during a panel

16
00:01:05,769 --> 00:01:10,449
at the recent QED con in Manchester I

17
00:01:08,170 --> 00:01:12,579
made comments that seem to have caused

18
00:01:10,450 --> 00:01:15,250
some concern when trying to emphasize

19
00:01:12,579 --> 00:01:16,959
the importance of being careful and

20
00:01:15,250 --> 00:01:19,780
doing your homework when being an active

21
00:01:16,959 --> 00:01:22,000
skeptic it is possible I was clumsy with

22
00:01:19,780 --> 00:01:24,189
my words having just come off the main

23
00:01:22,000 --> 00:01:27,310
stage maybe my thoughts weren't as sharp

24
00:01:24,189 --> 00:01:29,670
as they should have been if anyone got

25
00:01:27,310 --> 00:01:33,159
the impression that I was discouraging

26
00:01:29,670 --> 00:01:34,840
grass-roots skeptical activism or that

27
00:01:33,159 --> 00:01:37,539
this work should be left to those with

28
00:01:34,840 --> 00:01:40,180
more expertise than I do apologize

29

00:01:37,540 --> 00:01:42,760
indeed Michael Marshall pick me up on my

30
00:01:40,180 --> 00:01:45,700
comment to clarify what I had just said

31
00:01:42,760 --> 00:01:49,090
and I immediately agreed with him to be

32
00:01:45,700 --> 00:01:51,670
clear we need grassroots activism and I

33
00:01:49,090 --> 00:01:54,909
encourage it many of the promos on the

34
00:01:51,670 --> 00:01:58,420
skeptical zone are indeed for grass roots

35
00:01:54,909 --> 00:02:01,359
skeptics my main message albeit not as

36
00:01:58,420 --> 00:02:04,060
clear as it should have been was to take

37
00:02:01,359 --> 00:02:07,900
care well there you go i hope that

38
00:02:04,060 --> 00:02:09,489
clears up any confusion or people

39
00:02:07,900 --> 00:02:11,920
weren't exactly sure what i was getting

40
00:02:09,489 --> 00:02:14,378
out at the time i hope that makes that

41
00:02:11,919 --> 00:02:17,559
clear but coming up on this week's show

42
00:02:14,378 --> 00:02:22,628
it's back to Manchester back to QED con

43
00:02:17,560 --> 00:02:24,280

when I chat to dr. Colin right dr. Colin

44

00:02:22,628 --> 00:02:28,718

right is involved with something called

45

00:02:24,280 --> 00:02:31,419

maths Jam he's a mathematician he's a

46

00:02:28,718 --> 00:02:33,759

juggler and he does

47

00:02:31,419 --> 00:02:35,500

he's a sort of a guy he sort of reminds

48

00:02:33,759 --> 00:02:38,049

me of the doctor you know in Doctor Who

49

00:02:35,500 --> 00:02:39,610

so he carries this little case around

50

00:02:38,050 --> 00:02:41,349

with him in he opens it up and out pops

51

00:02:39,610 --> 00:02:45,190

all sorts of surprises and tricks and

52

00:02:41,348 --> 00:02:47,379

puzzles and problems and illusions it's

53

00:02:45,189 --> 00:02:48,818

it's it's quite something anyway I'm

54

00:02:47,379 --> 00:02:50,889

going to have a chat with dr. Colin

55

00:02:48,818 --> 00:02:53,560

right coming up at the top of the show

56

00:02:50,889 --> 00:02:54,969

and after that it's a week in science

57

00:02:53,560 --> 00:02:57,129

with our good friend dr. Paul with us

58
00:02:54,969 --> 00:03:01,870
from the Royal Institution of Australia

59
00:02:57,129 --> 00:03:05,439
at RI aus org a you it seems like every

60
00:03:01,870 --> 00:03:08,860
week is another big week in science well

61
00:03:05,439 --> 00:03:11,409
that's true following that dr. Rachel

62
00:03:08,860 --> 00:03:13,739
reports a very different dr. HC a very

63
00:03:11,409 --> 00:03:16,780
different doctor AG doctor 'he was on

64
00:03:13,739 --> 00:03:21,280
ABC radio in melbourne in the past week

65
00:03:16,780 --> 00:03:23,650
on 774 with Richard Stubbs so dr. Rachel

66
00:03:21,280 --> 00:03:26,129
reports this week is her appearance on

67
00:03:23,650 --> 00:03:29,519
Melbourne radio talking about

68
00:03:26,129 --> 00:03:31,900
vaccination issues and she even takes

69
00:03:29,519 --> 00:03:34,330
Colin talk back that's very interesting

70
00:03:31,900 --> 00:03:37,060
good on your doctor AG good on you for

71
00:03:34,330 --> 00:03:40,329
getting out there in on the the

72
00:03:37,060 --> 00:03:44,379
mainstream media and we thank very much

73
00:03:40,329 --> 00:03:47,230
thank 774 ABC radio for this audio and

74
00:03:44,379 --> 00:03:49,299
to round off the show Maynard spooky

75
00:03:47,229 --> 00:03:51,459
action you can't keep him away you can't

76
00:03:49,299 --> 00:03:53,290
keep a good man down may not heads back

77
00:03:51,459 --> 00:03:55,629
to Sydney skeptics in the pub and ask

78
00:03:53,289 --> 00:03:59,759
the big question the big question this

79
00:03:55,629 --> 00:04:04,959
week should skeptics still investigate

80
00:03:59,759 --> 00:04:08,139
UFOs hmm find out what Sydney skeptic

81
00:04:04,959 --> 00:04:10,180
and the pub people think later in the

82
00:04:08,139 --> 00:04:11,589
show now thank you to all the people

83
00:04:10,180 --> 00:04:14,260
have been writing in saying how much

84
00:04:11,590 --> 00:04:17,519
they enjoyed our little space adventure

85
00:04:14,259 --> 00:04:17,519
solar flare

86

00:04:24,250 --> 00:04:33,129
all stop captain right chief Chen I need

87
00:04:28,149 --> 00:04:34,959
dirt five now can we do it captain that

88
00:04:33,129 --> 00:04:37,060
emergency stop burnt out the antimatter

89
00:04:34,959 --> 00:04:39,759
exchange the relay couplings the

90
00:04:37,060 --> 00:04:43,480
microwave super heater and my hair dryer

91
00:04:39,759 --> 00:04:53,289
chief we need dirt five hair dryer or

92
00:04:43,480 --> 00:04:55,689
not hi captain chat out if you haven't

93
00:04:53,290 --> 00:04:59,530
heard of these is at wwc a petting zoo

94
00:04:55,689 --> 00:05:02,139
TV scroll down a little bit and you can

95
00:04:59,529 --> 00:05:03,668
see the link for solar flare a lot of

96
00:05:02,139 --> 00:05:06,250
work went into that and we had an

97
00:05:03,668 --> 00:05:08,469
enormous amount of fun putting that all

98
00:05:06,250 --> 00:05:09,819
together it did take a long time longer

99
00:05:08,470 --> 00:05:11,710
than I would have thought that when you

100
00:05:09,819 --> 00:05:13,449

listen to it I think you'll understand

101

00:05:11,709 --> 00:05:16,359

why the production that went into it was

102

00:05:13,449 --> 00:05:18,129

it was quite something but yeah lots of

103

00:05:16,360 --> 00:05:20,199

good comments coming back lots of emails

104

00:05:18,129 --> 00:05:22,480

i've been getting here people telling me

105

00:05:20,199 --> 00:05:25,120

there laughs laughter certain parts of

106

00:05:22,480 --> 00:05:27,819

their Anatomy off listening to it that's

107

00:05:25,120 --> 00:05:29,379

all very encouraging and if you liked

108

00:05:27,819 --> 00:05:32,800

solar flare if you thought it was great

109

00:05:29,379 --> 00:05:35,019

fun please spread the word please blog

110

00:05:32,800 --> 00:05:37,090

it Twitter right to your friends in your

111

00:05:35,019 --> 00:05:39,659

enemies and tell them to give solar

112

00:05:37,089 --> 00:05:42,039

flare I listened maybe they'll enjoy it

113

00:05:39,660 --> 00:05:44,760

now our friends down in Canberra the

114

00:05:42,040 --> 00:05:47,470

acct the Australian Capital Territory

115
00:05:44,759 --> 00:05:50,228
our nation's capital have been very busy

116
00:05:47,470 --> 00:05:51,970
as always and they've been very kind

117
00:05:50,228 --> 00:05:54,659
they've invited me to come and give a

118
00:05:51,970 --> 00:05:59,410
talk so I'll be appearing in Canberra on

119
00:05:54,660 --> 00:06:02,640
jun the first june the first from 1 30

120
00:05:59,410 --> 00:06:05,200
to three o'clock at the lecture theatre

121
00:06:02,639 --> 00:06:07,509
CSIRO discovery center which is in

122
00:06:05,199 --> 00:06:10,659
clooney's ross street acton in the acct

123
00:06:07,509 --> 00:06:14,319
and i'll be giving my talk adventures of

124
00:06:10,660 --> 00:06:17,320
a paranormal investigator or don't come

125
00:06:14,319 --> 00:06:19,120
the raw prawn with me ghost spoon

126
00:06:17,319 --> 00:06:21,610
bending mind tricks talking with the

127
00:06:19,120 --> 00:06:23,379
dead water divining and anti-vaccination

128
00:06:21,610 --> 00:06:26,290
movement all come under the microscope

129
00:06:23,379 --> 00:06:28,810
in this talk and demonstration so that's

130
00:06:26,290 --> 00:06:33,400
the first of june are for more

131
00:06:28,810 --> 00:06:36,009
information visit [www.pay xorg](http://www.payxorg.com) a you

132
00:06:33,399 --> 00:06:37,739
this is the torque I've been doing

133
00:06:36,009 --> 00:06:40,319
around the world lately

134
00:06:37,740 --> 00:06:42,210
including places like Oslo and Ireland

135
00:06:40,319 --> 00:06:45,780
was it entirely appropriate because

136
00:06:42,209 --> 00:06:49,948
after the after the talk will be heading

137
00:06:45,779 --> 00:06:52,469
for King o'malley's irish pub i hope to

138
00:06:49,949 --> 00:06:55,410
see you there well that's enough from me

139
00:06:52,470 --> 00:06:59,550
for this introduction it's time for me

140
00:06:55,410 --> 00:07:03,380
to run downstairs and have some let me

141
00:06:59,550 --> 00:07:06,629
see can you guess but you can't

142
00:07:03,379 --> 00:07:30,269
spaghetti on toast well I do that I hope

143

00:07:06,629 --> 00:07:32,339
you enjoy the skeptic zone dr. Colin

144
00:07:30,269 --> 00:07:35,969
right what is what is this math Jam

145
00:07:32,339 --> 00:07:38,098
maths kamath jam yeah bit of a tongue

146
00:07:35,970 --> 00:07:40,740
twister tell us all about it the basic

147
00:07:38,098 --> 00:07:43,079
idea of maths Jam is that a guy called

148
00:07:40,740 --> 00:07:44,968
matt parker had some friends he actually

149
00:07:43,079 --> 00:07:47,129
has friends and they were gathered

150
00:07:44,968 --> 00:07:48,779
together in a pub one evening in london

151
00:07:47,129 --> 00:07:51,209
and somebody showed a new gimmick that

152
00:07:48,779 --> 00:07:53,668
they had a new toy that they had and

153
00:07:51,209 --> 00:07:55,739
they were all science-based people so

154
00:07:53,668 --> 00:07:57,508
they started to play with that and then

155
00:07:55,740 --> 00:07:59,930
somebody else had another had a puzzle

156
00:07:57,509 --> 00:08:03,150
that they showed and so they started

157
00:07:59,930 --> 00:08:06,209

talking about puzzles and games and

158

00:08:03,149 --> 00:08:07,649

maths and those sorts of toys and they

159

00:08:06,209 --> 00:08:09,538

said yeah we should do this more often

160

00:08:07,649 --> 00:08:12,060

we don't get a chance to just kind of

161

00:08:09,538 --> 00:08:14,038

geek out together and swap these sorts

162

00:08:12,060 --> 00:08:16,259

of games and puzzles and so on so said

163

00:08:14,038 --> 00:08:19,288

well yeah let's meet up again and so it

164

00:08:16,259 --> 00:08:21,509

started that the second last Tuesday of

165

00:08:19,288 --> 00:08:23,399

every month they get a group of people

166

00:08:21,509 --> 00:08:27,060

and they would just go to a pub and

167

00:08:23,399 --> 00:08:29,579

commandeer a table and and start to do

168

00:08:27,060 --> 00:08:31,348

maths with each other and burnt puzzles

169

00:08:29,579 --> 00:08:32,879

and games and toys not specifically

170

00:08:31,348 --> 00:08:35,610

calculations in fact pretty much

171

00:08:32,879 --> 00:08:38,610

specifically not calculations and was in

172
00:08:35,610 --> 00:08:41,639
a pub so it was adults sharing amongst

173
00:08:38,610 --> 00:08:43,349
themselves as as as is equals almost

174
00:08:41,639 --> 00:08:45,059
although you've caused some of them work

175
00:08:43,349 --> 00:08:46,620
more mathematically able and some were

176
00:08:45,059 --> 00:08:48,208
less mathematically able but that didn't

177
00:08:46,620 --> 00:08:50,460
matter because they were sharing fun

178
00:08:48,208 --> 00:08:53,069
games toys puzzles and so on

179
00:08:50,460 --> 00:08:54,389
and then I I went to a big conference in

180
00:08:53,070 --> 00:08:56,610
America and came back to another

181
00:08:54,389 --> 00:08:59,370
conference here and and one of my

182
00:08:56,610 --> 00:09:03,180
friends said yet there's this there's no

183
00:08:59,370 --> 00:09:05,789
place for adults to chat about maths

184
00:09:03,179 --> 00:09:08,459
there are so many that there are serious

185
00:09:05,789 --> 00:09:10,919
conferences about education and maths

186
00:09:08,460 --> 00:09:14,190
education but there's no idiots to get

187
00:09:10,919 --> 00:09:16,679
together and play and so I went and

188
00:09:14,190 --> 00:09:19,560
talked to Matt and James grime who goes

189
00:09:16,679 --> 00:09:21,329
out here's another math guy who goes out

190
00:09:19,559 --> 00:09:23,159
and talks to two school kids and adults

191
00:09:21,330 --> 00:09:25,170
and so forth and we got together he said

192
00:09:23,159 --> 00:09:28,139
well how can we do this and so we got

193
00:09:25,169 --> 00:09:30,179
together to run a weekend of exactly

194
00:09:28,139 --> 00:09:32,340
this kind of thing it's not attached to

195
00:09:30,179 --> 00:09:34,769
education it's not attached to

196
00:09:32,340 --> 00:09:37,889
continuing professional development it's

197
00:09:34,769 --> 00:09:42,149
not worthy it's just let's get together

198
00:09:37,889 --> 00:09:43,949
and have fun as a side effect there's a

199
00:09:42,149 --> 00:09:45,629
bunch of stuff that people take back to

200

00:09:43,950 --> 00:09:48,900
their schools to get kids interested

201
00:09:45,629 --> 00:09:50,879
puzzles toys games and so forth but we

202
00:09:48,899 --> 00:09:53,189
have a wide range of people we have an

203
00:09:50,879 --> 00:09:55,289
Egyptologist who comes and talks about

204
00:09:53,190 --> 00:09:56,730
the maths in ancient Egypt we have a

205
00:09:55,289 --> 00:09:59,009
linguist who comes and talks about

206
00:09:56,730 --> 00:10:01,980
patterns in language a musicologist who

207
00:09:59,009 --> 00:10:03,629
comes we have retired math lecturers we

208
00:10:01,980 --> 00:10:05,879
do have students come along because this

209
00:10:03,629 --> 00:10:07,649
is not in a pub so we can have some

210
00:10:05,879 --> 00:10:10,710
younger kids come along but it's for

211
00:10:07,649 --> 00:10:13,289
adults to play with the mathematical

212
00:10:10,710 --> 00:10:16,680
ideas it's not to be attached to

213
00:10:13,289 --> 00:10:20,309
education or to train people and all the

214
00:10:16,679 --> 00:10:23,969

talks are five minutes five minutes five

215

00:10:20,309 --> 00:10:25,169

minutes which it makes them the person

216

00:10:23,970 --> 00:10:26,700

giving the talk really think about what

217

00:10:25,169 --> 00:10:28,589

they're going to say right oh yeah and

218

00:10:26,700 --> 00:10:30,840

the other thing is you can't try and

219

00:10:28,590 --> 00:10:32,580

teach people things in five minutes all

220

00:10:30,840 --> 00:10:34,830

you can do is show them something that

221

00:10:32,580 --> 00:10:36,330

you think is interesting and you think

222

00:10:34,830 --> 00:10:38,400

that they will find interesting so you

223

00:10:36,330 --> 00:10:41,040

are sharing something that you find

224

00:10:38,399 --> 00:10:43,289

interesting and we've got sort of 100 to

225

00:10:41,039 --> 00:10:45,599

150 people come along to these weekends

226

00:10:43,289 --> 00:10:47,639

and amongst them they will sup be some

227

00:10:45,600 --> 00:10:49,529

who just don't care about what you just

228

00:10:47,639 --> 00:10:51,899

showed them but there will be others who

229
00:10:49,529 --> 00:10:53,459
think that is really cool and then come

230
00:10:51,899 --> 00:10:56,579
and talk to you and that's the other big

231
00:10:53,460 --> 00:10:59,670
thing is only sixty percent of the time

232
00:10:56,580 --> 00:11:01,950
is actually spent in sessions in talks

233
00:10:59,669 --> 00:11:03,449
so we have an hour of talks we fit fit

234
00:11:01,950 --> 00:11:06,120
eight or nine talks in an hour

235
00:11:03,450 --> 00:11:07,710
and then we have 30 minutes as a break

236
00:11:06,120 --> 00:11:10,289
for people to play with toys that are on

237
00:11:07,710 --> 00:11:12,240
the tables or to talk to the speakers

238
00:11:10,289 --> 00:11:14,159
from the previous session and then we go

239
00:11:12,240 --> 00:11:16,019
back for another eight or nine Talt in

240
00:11:14,159 --> 00:11:18,659
an hour and then we have another half an

241
00:11:16,019 --> 00:11:20,549
hour breaks is plenty of time for people

242
00:11:18,659 --> 00:11:22,529
to play with the toys that are there

243
00:11:20,549 --> 00:11:24,240
play games against each other try and

244
00:11:22,529 --> 00:11:25,649
construct the models that they've got or

245
00:11:24,240 --> 00:11:28,289
talk to the speakers about what they're

246
00:11:25,649 --> 00:11:30,090
interested in now if our listeners care

247
00:11:28,289 --> 00:11:35,219
to find out more about this where is the

248
00:11:30,090 --> 00:11:37,370
URL what work may visit www.fcn.com it's

249
00:11:35,220 --> 00:11:39,930
pretty easy to remember and you have a

250
00:11:37,370 --> 00:11:43,379
conundrum for our listeners may be a

251
00:11:39,929 --> 00:11:45,829
really cool one if you take a square yes

252
00:11:43,379 --> 00:11:49,259
it's really easy to cut it into pieces

253
00:11:45,830 --> 00:11:54,330
identical pieces where all of them touch

254
00:11:49,259 --> 00:11:57,509
the center right first question in how

255
00:11:54,330 --> 00:12:00,270
many ways can you do this that's a tough

256
00:11:57,509 --> 00:12:03,139
one but the second question is if you

257

00:12:00,269 --> 00:12:05,610
cut a circle in two identical pieces

258
00:12:03,139 --> 00:12:07,350
it's hard to think of any way of doing

259
00:12:05,610 --> 00:12:09,120
it where they don't all touch the center

260
00:12:07,350 --> 00:12:11,790
I mean you just slice it up like a pizza

261
00:12:09,120 --> 00:12:14,250
yeah so the challenge is cut a circle in

262
00:12:11,789 --> 00:12:17,339
two identical pieces that do not all

263
00:12:14,250 --> 00:12:18,840
touch the center point we have a little

264
00:12:17,340 --> 00:12:21,950
audience listening to our interview

265
00:12:18,840 --> 00:12:21,950
today and their faces are going

266
00:12:22,230 --> 00:12:27,039
that's a good one oh I listeners there's

267
00:12:24,789 --> 00:12:32,129
a little conundrum for you and visit the

268
00:12:27,039 --> 00:12:32,129
website then mash this one math is fun

269
00:12:43,620 --> 00:12:49,990
greetings skeptics erm listeners do you

270
00:12:47,620 --> 00:12:52,600
know what to do in August come to

271
00:12:49,990 --> 00:12:56,200

Stockholm Sweden and meet astronaut

272

00:12:52,600 --> 00:13:00,330

killer tofu lasagna activist hey Lee

273

00:12:56,200 --> 00:13:03,400

Stevens / guru upon snow sleen

274

00:13:00,330 --> 00:13:06,879

undercover health journalist an abyssea

275

00:13:03,399 --> 00:13:09,879

and many more at the 15th European

276

00:13:06,879 --> 00:13:12,580

skeptics Congress friday the

277

00:13:09,879 --> 00:13:16,179

twenty-third to sunday the 25th of

278

00:13:12,580 --> 00:13:20,139

august in stockholm sweden but a 15th

279

00:13:16,179 --> 00:13:25,559

european skeptics conference www dr.

280

00:13:20,139 --> 00:13:30,509

Euroskeptic Scarlett I'm talking www

281

00:13:25,559 --> 00:13:30,509

Euroskeptic scone dot org

282

00:13:37,539 --> 00:13:43,490

welcome to a week in science from our

283

00:13:40,340 --> 00:13:45,730

aisles this week a new bird flu the

284

00:13:43,490 --> 00:13:55,159

evolution of taller thinner women and

285

00:13:45,730 --> 00:13:56,778

tiny flying robots Chinese scientists

286
00:13:55,159 --> 00:13:59,750
have confirmed that a new influenza

287
00:13:56,778 --> 00:14:02,990
virus has been transmitted from birds to

288
00:13:59,750 --> 00:14:06,740
humans 108 people our thoughts have been

289
00:14:02,990 --> 00:14:09,289
infected with the h7n9 virus since it

290
00:14:06,740 --> 00:14:11,870
first emerged in February this year with

291
00:14:09,289 --> 00:14:13,490
a suspected death toll of 22 people

292
00:14:11,870 --> 00:14:16,100
appear to have picked up the virus from

293
00:14:13,490 --> 00:14:17,659
chickens in meat markets in a separate

294
00:14:16,100 --> 00:14:20,720
study scientists have identified a

295
00:14:17,659 --> 00:14:24,439
possible way that the h5n1 form of bird

296
00:14:20,720 --> 00:14:28,940
flu which first emerged in 2003 infects

297
00:14:24,440 --> 00:14:31,130
humans Australian researchers may have

298
00:14:28,940 --> 00:14:33,310
found a cheap and easy way to detect

299
00:14:31,129 --> 00:14:36,019
early cases of Alzheimer's disease

300
00:14:33,309 --> 00:14:38,299
symptoms of Alzheimer's only show up

301
00:14:36,019 --> 00:14:40,519
after significant damages occurred to

302
00:14:38,299 --> 00:14:43,579
the brain and currently early detection

303
00:14:40,519 --> 00:14:45,620
tests are invasive and expensive the

304
00:14:43,580 --> 00:14:47,540
research found compounds in the blood

305
00:14:45,620 --> 00:14:49,879
that differed between people with high

306
00:14:47,539 --> 00:14:53,449
and low risks of developing the disease

307
00:14:49,879 --> 00:14:55,250
this new blood signature could allow

308
00:14:53,450 --> 00:14:57,080
widespread screening and early

309
00:14:55,250 --> 00:15:02,659
interventions that may slow the

310
00:14:57,080 --> 00:15:05,750
progression of Alzheimer's girls who

311
00:15:02,659 --> 00:15:07,879
receive two doses of the HPV vaccine had

312
00:15:05,750 --> 00:15:10,279
the same protection as those who had the

313
00:15:07,879 --> 00:15:12,679
recommended three doses in an effort to

314

00:15:10,279 --> 00:15:14,779
protect bees the European Union has

315
00:15:12,679 --> 00:15:17,539
announced severe restrictions on the use

316
00:15:14,779 --> 00:15:19,939
of three pesticides cicadas clean

317
00:15:17,539 --> 00:15:22,669
themselves by making dewdrops jump from

318
00:15:19,940 --> 00:15:24,920
their wings and living longer and having

319
00:15:22,669 --> 00:15:27,799
fewer children maybe making women taller

320
00:15:24,919 --> 00:15:30,500
and thinner scientists at Harvard

321
00:15:27,799 --> 00:15:33,259
University have built a flying robot

322
00:15:30,500 --> 00:15:35,419
that is no bigger than a house fly they

323
00:15:33,259 --> 00:15:37,338
used cutting edge materials to build

324
00:15:35,419 --> 00:15:40,250
micro structures within the wing

325
00:15:37,339 --> 00:15:42,650
allowing it to flap when electrified the

326
00:15:40,250 --> 00:15:44,179
tiny robot offers a new way to study the

327
00:15:42,649 --> 00:15:46,278
flight mechanics of flapping

328
00:15:44,179 --> 00:15:51,069

wings as well as helping miniaturized

329

00:15:46,278 --> 00:15:51,070

sensing and computational technologies

330

00:15:51,850 --> 00:15:57,830

if you love a week in science and why

331

00:15:55,909 --> 00:15:59,838

wouldn't you why not share it with your

332

00:15:57,830 --> 00:16:01,550

friends we're growing a healthy

333

00:15:59,839 --> 00:16:06,529

following and you can help spread the

334

00:16:01,549 --> 00:16:10,129

word send your friends to RI aus org a

335

00:16:06,528 --> 00:16:12,830

you / week in sai for video and podcasts

336

00:16:10,129 --> 00:16:14,870

versions plus more information on the

337

00:16:12,830 --> 00:16:17,028

stories that's been the highlights of

338

00:16:14,870 --> 00:16:19,278

another big week in science for more

339

00:16:17,028 --> 00:16:23,419

information and other science news check

340

00:16:19,278 --> 00:16:26,088

out the are isles website RI aus dot org

341

00:16:23,419 --> 00:16:28,849

dot a you where you can also sign up for

342

00:16:26,089 --> 00:16:31,520

notifications of future episodes you can

343
00:16:28,850 --> 00:16:35,269
also follow a week in science on twitter

344
00:16:31,519 --> 00:16:37,338
using the hashtag week inside i'm poor

345
00:16:35,269 --> 00:16:48,230
willis and on behalf of the our oils

346
00:16:37,339 --> 00:16:50,209
team i'll see you next week this is

347
00:16:48,230 --> 00:16:53,089
desiree host of Canadian radio shows

348
00:16:50,208 --> 00:16:55,250
skeptically speaking for those of you

349
00:16:53,089 --> 00:16:57,830
that don't know Kenneth is quite similar

350
00:16:55,250 --> 00:17:00,919
to Australia people know is primarily

351
00:16:57,830 --> 00:17:04,490
for our weather and our beer and we have

352
00:17:00,919 --> 00:17:07,399
a queen just like you do same one as you

353
00:17:04,490 --> 00:17:09,318
do actually we also have mythical

354
00:17:07,400 --> 00:17:11,720
monsters and people who think they have

355
00:17:09,318 --> 00:17:14,048
psychic abilities and people who think

356
00:17:11,720 --> 00:17:16,058
that vaccinations are bad for you

357
00:17:14,048 --> 00:17:20,158
so keep listening to the skeptic zone

358
00:17:16,058 --> 00:17:20,158
and know that we're all in this together

359
00:17:22,679 --> 00:17:30,909
now it's time for dr. Richie reports

360
00:17:26,078 --> 00:17:33,278
with dr. Rachel Dunlop we're going to

361
00:17:30,909 --> 00:17:35,799
look at immunization next and although

362
00:17:33,278 --> 00:17:39,519
the evidence against immunization has

363
00:17:35,798 --> 00:17:41,618
been completely debunked still people

364
00:17:39,519 --> 00:17:44,829
cling to the idea that immunization is

365
00:17:41,618 --> 00:17:48,038
somehow bad or dangerous or you

366
00:17:44,829 --> 00:17:51,668
shouldn't be careful look out are they

367
00:17:48,038 --> 00:17:53,739
risk involved in immunization sure what

368
00:17:51,669 --> 00:17:55,090
likelihood of risk are they what level

369
00:17:53,739 --> 00:17:57,909
of risk are there and what a genuine

370
00:17:55,089 --> 00:18:01,269
risks as opposed to rumors and the

371

00:17:57,909 --> 00:18:02,649
hangovers have discounted evidence we're

372
00:18:01,269 --> 00:18:04,239
going to talk about that next it's very

373
00:18:02,648 --> 00:18:06,248
difficult to shake an opinion once

374
00:18:04,239 --> 00:18:08,499
you've formed it particularly if you've

375
00:18:06,249 --> 00:18:12,548
been vocal in that opinion if you've

376
00:18:08,499 --> 00:18:14,980
stood there and I get a case and then

377
00:18:12,548 --> 00:18:17,019
find out that the case you argued had no

378
00:18:14,980 --> 00:18:21,009
basis in fact it's often difficult to

379
00:18:17,019 --> 00:18:24,548
retract and call again as they lay out

380
00:18:21,009 --> 00:18:27,460
of line with that I guess it's part of

381
00:18:24,548 --> 00:18:30,038
why an anti immunization debate still

382
00:18:27,460 --> 00:18:33,038
exists that there's some undercurrent of

383
00:18:30,038 --> 00:18:35,769
uncertainty there's some ah but didn't I

384
00:18:33,038 --> 00:18:38,108
hear something interestingly the rates

385
00:18:35,769 --> 00:18:40,210

of immunization in Australia have fallen

386

00:18:38,108 --> 00:18:42,519

in some areas some areas of Australia

387

00:18:40,210 --> 00:18:45,879

there are people gain I choose not to

388

00:18:42,519 --> 00:18:47,858

immunize my children I wonder why rachel

389

00:18:45,878 --> 00:18:49,538

Dunlop is a postdoctoral fellow at the

390

00:18:47,858 --> 00:18:51,099

University of Technology in Sydney she

391

00:18:49,538 --> 00:18:54,009

recently wrote an article on the

392

00:18:51,099 --> 00:18:55,658

conversation about this hi Rachel hi

393

00:18:54,009 --> 00:18:57,579

Richard thanks for having me you're also

394

00:18:55,659 --> 00:19:01,509

vice president of Australian skeptics

395

00:18:57,579 --> 00:19:03,418

yes I am um what what prompted you to

396

00:19:01,509 --> 00:19:05,259

write the article in the first place

397

00:19:03,419 --> 00:19:07,028

well I've been studying the

398

00:19:05,259 --> 00:19:08,798

anti-vaccination movement in Australia

399

00:19:07,028 --> 00:19:11,169

for about three or four years now and

400
00:19:08,798 --> 00:19:13,388
the more you read the stuff that they

401
00:19:11,169 --> 00:19:15,220
write the more you see the same sort of

402
00:19:13,388 --> 00:19:17,288
things come up again and again and again

403
00:19:15,220 --> 00:19:19,720
and I guess some of them are what you

404
00:19:17,288 --> 00:19:21,339
call them unsinkable rubber ducks in a

405
00:19:19,720 --> 00:19:23,200
sense it doesn't matter how many times

406
00:19:21,339 --> 00:19:24,999
you refute them or you explain them to

407
00:19:23,200 --> 00:19:27,640
people they still seem to stick around

408
00:19:24,999 --> 00:19:29,890
and these things are quite

409
00:19:27,640 --> 00:19:32,410
nash's and they can influence parents

410
00:19:29,890 --> 00:19:34,930
decisions to vaccinate particularly

411
00:19:32,410 --> 00:19:37,090
through their friends or you know their

412
00:19:34,930 --> 00:19:38,500
network of people around child care and

413
00:19:37,089 --> 00:19:40,329
that sort of thing so it's important I

414
00:19:38,500 --> 00:19:42,519
think to address them so that parents

415
00:19:40,329 --> 00:19:45,329
have a cheat sheet in a way which they

416
00:19:42,519 --> 00:19:47,170
can refer to and get some you know

417
00:19:45,329 --> 00:19:48,579
confidence that these things are

418
00:19:47,170 --> 00:19:50,560
actually myths they're not true then

419
00:19:48,579 --> 00:19:53,019
there's no evidence in in what these

420
00:19:50,559 --> 00:19:54,970
people are saying part of what grinds my

421
00:19:53,019 --> 00:19:56,079
gears about this argument is that people

422
00:19:54,970 --> 00:19:58,420
are willing to make decisions about

423
00:19:56,079 --> 00:20:02,349
their kids not getting immunized based

424
00:19:58,420 --> 00:20:05,680
on a conversation you know some friends

425
00:20:02,349 --> 00:20:07,269
said but if they they they won't

426
00:20:05,680 --> 00:20:10,390
research the facts and be if they do

427
00:20:07,269 --> 00:20:11,769
that they look with suspicion on Western

428

00:20:10,390 --> 00:20:14,950
medicine I'm doing that thing with my

429
00:20:11,769 --> 00:20:18,029
fingers and scientific findings yeah so

430
00:20:14,950 --> 00:20:21,580
so that rumor and innuendo from a

431
00:20:18,029 --> 00:20:24,339
unscientific no knowledge base person is

432
00:20:21,579 --> 00:20:25,929
somehow given more weight than I yeah

433
00:20:24,339 --> 00:20:28,629
well this is what several years of

434
00:20:25,930 --> 00:20:31,000
research and science shows us why is

435
00:20:28,630 --> 00:20:33,190
there it's curious isn't it and I think

436
00:20:31,000 --> 00:20:36,400
it's partly because anecdotes are very

437
00:20:33,190 --> 00:20:37,960
powerful things there's some psychology

438
00:20:36,400 --> 00:20:40,120
behind that I'm not a psychologist so I

439
00:20:37,960 --> 00:20:42,610
couldn't begin to explain it but the

440
00:20:40,119 --> 00:20:44,469
power of anecdote is very strong the

441
00:20:42,609 --> 00:20:47,319
thing about science is it can be pretty

442
00:20:44,470 --> 00:20:49,480

boring it can be pretty dry and people

443

00:20:47,319 --> 00:20:51,069

don't generally relate to it so I can

444

00:20:49,480 --> 00:20:53,230

you know sit here and put up graphs

445

00:20:51,069 --> 00:20:55,869

until the cows come home showing you the

446

00:20:53,230 --> 00:20:58,180

evidence that once we introduced the Hib

447

00:20:55,869 --> 00:20:59,859

vaccine in nineteen ninety four cases

448

00:20:58,180 --> 00:21:02,049

dropped ninety percent but that's not

449

00:20:59,859 --> 00:21:03,819

particularly a motive and when you have

450

00:21:02,049 --> 00:21:06,490

stories of children that have been

451

00:21:03,819 --> 00:21:08,559

injured by vaccines or their parents say

452

00:21:06,490 --> 00:21:11,769

that they have that stuff is incredibly

453

00:21:08,559 --> 00:21:13,450

emotive and there are some yes are you

454

00:21:11,769 --> 00:21:15,190

wearing your insignia no we're going to

455

00:21:13,450 --> 00:21:16,840

buy into each other a little bit so yeah

456

00:21:15,190 --> 00:21:18,549

we weren't worried about that there's

457
00:21:16,839 --> 00:21:21,220
also that other thing too that people

458
00:21:18,549 --> 00:21:25,419
gah pharmaceutical companies make money

459
00:21:21,220 --> 00:21:26,620
out of vaccines so always going to say

460
00:21:25,420 --> 00:21:28,000
you should have them and everyone not

461
00:21:26,619 --> 00:21:29,709
yeah that's are you there must be the

462
00:21:28,000 --> 00:21:31,299
reason I mean of course they make money

463
00:21:29,710 --> 00:21:33,880
that you know there are business but in

464
00:21:31,299 --> 00:21:36,069
fact it most of their profit does not

465
00:21:33,880 --> 00:21:38,080
come from making vaccinations and when

466
00:21:36,069 --> 00:21:40,240
you think about it logically wouldn't it

467
00:21:38,079 --> 00:21:41,500
be more beneficial for pharmaceutical

468
00:21:40,240 --> 00:21:43,089
companies if we all got the

469
00:21:41,500 --> 00:21:45,670
diseases because then we'd be sicker

470
00:21:43,089 --> 00:21:47,439
sticker for longer we probably have

471
00:21:45,670 --> 00:21:49,720
chronic side effects chronic long-term

472
00:21:47,440 --> 00:21:52,059
effects surely that would make them more

473
00:21:49,720 --> 00:21:54,759
money than preventive medicine which is

474
00:21:52,059 --> 00:21:56,710
essentially what vaccines are what

475
00:21:54,759 --> 00:21:59,230
you've studied this for so long what's

476
00:21:56,710 --> 00:22:01,829
the thinking behind people who don't

477
00:21:59,230 --> 00:22:04,450
have their child vaccinated in Australia

478
00:22:01,829 --> 00:22:07,659
particularly in terms of what happens if

479
00:22:04,450 --> 00:22:10,029
that child then goes overseas yeah this

480
00:22:07,660 --> 00:22:11,860
is a really tricky situation because I

481
00:22:10,029 --> 00:22:13,319
guess there's two camps in Australia

482
00:22:11,859 --> 00:22:15,399
there's what we know as the

483
00:22:13,319 --> 00:22:17,250
conscientious objectors and these are

484
00:22:15,400 --> 00:22:19,660
parents that have identified as

485

00:22:17,250 --> 00:22:21,220
objecting to vaccinations and they've

486
00:22:19,660 --> 00:22:23,050
actually signed a form to say they will

487
00:22:21,220 --> 00:22:24,880
not get their children vaccinated and

488
00:22:23,049 --> 00:22:27,220
then there's probably a large percentage

489
00:22:24,880 --> 00:22:28,890
and that that group is only about one

490
00:22:27,220 --> 00:22:31,150
point seven percent of the population

491
00:22:28,890 --> 00:22:33,130
but there's a group that we can't really

492
00:22:31,150 --> 00:22:34,690
quantitate or measure and that's called

493
00:22:33,130 --> 00:22:37,780
the fence sitters and their parents that

494
00:22:34,690 --> 00:22:39,610
are just confused and worried about the

495
00:22:37,779 --> 00:22:41,799
rumors that they hear and so they might

496
00:22:39,609 --> 00:22:44,919
either delay their kids vaccination or

497
00:22:41,799 --> 00:22:46,269
they might not get the full schedule of

498
00:22:44,920 --> 00:22:48,580
vaccination because of things that

499
00:22:46,269 --> 00:22:50,440

they've heard but as you say this does

500

00:22:48,579 --> 00:22:53,710

impact on children down the track and

501

00:22:50,440 --> 00:22:55,870

only two years ago in Brisbane a 22 year

502

00:22:53,710 --> 00:22:57,579

old girl died of diphtheria after a

503

00:22:55,869 --> 00:22:59,829

friend of hers brought it back from

504

00:22:57,579 --> 00:23:01,419

overseas and she probably didn't even

505

00:22:59,829 --> 00:23:03,189

realize she wasn't vaccinated for

506

00:23:01,420 --> 00:23:06,730

diphtheria and unfortunately she caught

507

00:23:03,190 --> 00:23:08,350

it and she died so in Australia now most

508

00:23:06,730 --> 00:23:10,299

of the diseases that we see here are

509

00:23:08,349 --> 00:23:12,909

imported and because we have a fairly

510

00:23:10,299 --> 00:23:15,430

high level of vaccination in general and

511

00:23:12,910 --> 00:23:16,810

in on average so mostly when you see

512

00:23:15,430 --> 00:23:18,100

those sort of things happen it's because

513

00:23:16,809 --> 00:23:20,409

they're brought in from overseas or

514
00:23:18,099 --> 00:23:23,079
people pick them up overseas John's

515
00:23:20,410 --> 00:23:24,850
called in from Q hi John yes look I

516
00:23:23,079 --> 00:23:27,699
bought it just to make a few points of

517
00:23:24,849 --> 00:23:29,349
the problem with vaccinations is that

518
00:23:27,700 --> 00:23:31,450
they're not based on the gold standard

519
00:23:29,349 --> 00:23:34,480
of scientific proof which is the control

520
00:23:31,450 --> 00:23:36,940
trial that compares vaccinated to an

521
00:23:34,480 --> 00:23:39,579
unvaccinated population and if that is

522
00:23:36,940 --> 00:23:41,710
done we know for sure whether vaccines

523
00:23:39,579 --> 00:23:43,809
to help to reduce the incidence of the

524
00:23:41,710 --> 00:23:47,470
infectious disease they're intended for

525
00:23:43,809 --> 00:23:49,480
and also that the vaccinated group is it

526
00:23:47,470 --> 00:23:52,240
does not suffer adverse effects which

527
00:23:49,480 --> 00:23:52,950
would outweigh the benefits now that is

528
00:23:52,240 --> 00:23:54,990
not been

529
00:23:52,950 --> 00:23:57,660
and that's the problem now if you look

530
00:23:54,990 --> 00:23:59,789
at the whooping cough vaccination that

531
00:23:57,660 --> 00:24:03,120
with the acellular vaccine this was

532
00:23:59,789 --> 00:24:06,240
found that the epidemic that came it was

533
00:24:03,119 --> 00:24:07,799
in Australia the vaccination offered no

534
00:24:06,240 --> 00:24:11,430
benefit in terms of reducing the

535
00:24:07,799 --> 00:24:13,769
incidence the vaccination rates were

536
00:24:11,430 --> 00:24:16,049
about ninety percent of the cases

537
00:24:13,769 --> 00:24:18,420
eighty-nine percent were vaccinated and

538
00:24:16,049 --> 00:24:19,889
Levin were unvaccinated which means that

539
00:24:18,420 --> 00:24:22,710
the vaccination made no difference at

540
00:24:19,890 --> 00:24:24,780
all there is no a data about this severe

541
00:24:22,710 --> 00:24:27,120
the intensity of the infection so we

542

00:24:24,779 --> 00:24:30,059
can't report on that but that was based

543
00:24:27,119 --> 00:24:32,519
on analysis of the statistics after the

544
00:24:30,059 --> 00:24:34,259
event first on do you think um do you

545
00:24:32,519 --> 00:24:36,299
think people should vaccinate their

546
00:24:34,259 --> 00:24:38,160
children I don't know because we don't

547
00:24:36,299 --> 00:24:39,629
have proof about safety or no no it's

548
00:24:38,160 --> 00:24:41,370
just an opinion what's your opinion I

549
00:24:39,630 --> 00:24:43,140
don't know because what you know that we

550
00:24:41,369 --> 00:24:44,879
do not have the proper data about safety

551
00:24:43,140 --> 00:24:46,759
even if he's there let me put in other

552
00:24:44,880 --> 00:24:49,440
ways they were benefit to the Society of

553
00:24:46,759 --> 00:24:51,509
everyone's vaccinated there may be there

554
00:24:49,440 --> 00:24:53,820
may not be we don't know so you now did

555
00:24:51,509 --> 00:24:55,470
I comment on that Richard I've just I

556
00:24:53,819 --> 00:24:57,569

wanted to get let John get all his

557

00:24:55,470 --> 00:24:59,579

points out and make his case what do you

558

00:24:57,569 --> 00:25:00,960

think he said that this that we can't

559

00:24:59,579 --> 00:25:03,960

compare this that we just don't know

560

00:25:00,960 --> 00:25:05,069

we've never compared a vaccinated

561

00:25:03,960 --> 00:25:07,230

population with a non-vaccinated

562

00:25:05,069 --> 00:25:10,740

population so we have no idea if it's

563

00:25:07,230 --> 00:25:12,930

effective well we have actually but the

564

00:25:10,740 --> 00:25:15,120

point that you raised initially about

565

00:25:12,930 --> 00:25:17,130

the randomized controlled trial or we

566

00:25:15,119 --> 00:25:18,809

can't do that ethically because a

567

00:25:17,130 --> 00:25:20,850

randomized control trial would involve

568

00:25:18,809 --> 00:25:23,099

taking two groups let's say of children

569

00:25:20,849 --> 00:25:25,679

putting them into two separate rooms

570

00:25:23,099 --> 00:25:27,179

vaccinating one group not vaccinating

571
00:25:25,680 --> 00:25:29,670
the other group and exposing them to a

572
00:25:27,180 --> 00:25:31,799
vaccine preventable disease now how does

573
00:25:29,670 --> 00:25:33,720
everyone think about doing that so it

574
00:25:31,799 --> 00:25:35,309
doesn't sound like a very good idea what

575
00:25:33,720 --> 00:25:36,839
that means John's right isn't he that he

576
00:25:35,309 --> 00:25:38,460
did we haven't got a gold down we

577
00:25:36,839 --> 00:25:41,220
haven't got that classic song no but I

578
00:25:38,460 --> 00:25:44,100
study so there no how can we be certain

579
00:25:41,220 --> 00:25:46,950
about because we have epidemiology we

580
00:25:44,099 --> 00:25:49,409
have a lot of evidence from history that

581
00:25:46,950 --> 00:25:51,480
shows us that vaccination reduces

582
00:25:49,410 --> 00:25:53,850
vaccine-preventable diseases now for

583
00:25:51,480 --> 00:25:55,920
example when we stopped vaccinating in

584
00:25:53,849 --> 00:25:57,689
particular areas we see a resurgence of

585
00:25:55,920 --> 00:26:00,240
vaccine-preventable diseases what happen

586
00:25:57,690 --> 00:26:01,950
in Wales yeah well this is the thing I

587
00:26:00,240 --> 00:26:03,870
mean it's a good point you raised John

588
00:26:01,950 --> 00:26:05,549
because at the moment because of low

589
00:26:03,869 --> 00:26:06,599
levels of vaccination for measles in

590
00:26:05,549 --> 00:26:08,609
Wales

591
00:26:06,599 --> 00:26:10,740
there's been an outbreak of measles

592
00:26:08,609 --> 00:26:14,099
there's now up to about a thousand cases

593
00:26:10,740 --> 00:26:15,120
and one death the man who died did have

594
00:26:14,099 --> 00:26:16,889
measles and we're waiting for

595
00:26:15,119 --> 00:26:19,319
confirmation as to whether that was the

596
00:26:16,890 --> 00:26:21,210
cause but we had levels dropped there

597
00:26:19,319 --> 00:26:23,129
because people were afraid of the MMR

598
00:26:21,210 --> 00:26:24,538
vaccine and so we as soon as levels

599

00:26:23,130 --> 00:26:26,490
dropped we got an increase in vaccine

600
00:26:24,538 --> 00:26:30,000
preventable diseases now the other thing

601
00:26:26,490 --> 00:26:31,950
is with smallpox now well we got rid of

602
00:26:30,000 --> 00:26:35,490
smallpox because we vaccinated until it

603
00:26:31,950 --> 00:26:37,169
was gone polio is almost gone we had two

604
00:26:35,490 --> 00:26:39,960
years free of polio and India just

605
00:26:37,169 --> 00:26:41,669
recently so we don't need to do what

606
00:26:39,960 --> 00:26:43,650
John says is the gold standard it's

607
00:26:41,669 --> 00:26:45,210
unethical to do it and we don't need it

608
00:26:43,650 --> 00:26:48,419
because we've got plenty of evidence for

609
00:26:45,210 --> 00:26:50,370
it John can't doesn't agreed can't form

610
00:26:48,419 --> 00:26:51,720
an opinion about immunization or not

611
00:26:50,369 --> 00:26:53,788
because he says there's not enough

612
00:26:51,720 --> 00:26:56,069
evidence as to whether it works or not

613
00:26:53,788 --> 00:26:57,629

would you disagree I would disagree i

614

00:26:56,069 --> 00:26:59,908

would suggest that he might be looking

615

00:26:57,630 --> 00:27:02,070

in the wrong places and he did seem to

616

00:26:59,909 --> 00:27:03,600

quote some stats there which I think

617

00:27:02,069 --> 00:27:05,939

he's cherry-picking slightly because

618

00:27:03,599 --> 00:27:07,829

he's talking about the age group that a

619

00:27:05,940 --> 00:27:09,419

young children were with the whooping

620

00:27:07,829 --> 00:27:12,928

cough vaccine which is covered under the

621

00:27:09,419 --> 00:27:15,179

dTap now if you look at the number of

622

00:27:12,929 --> 00:27:17,580

adults in Australia who are immune and

623

00:27:15,179 --> 00:27:20,130

still vaccinated against whooping cough

624

00:27:17,579 --> 00:27:22,439

there's only about eleven percent so in

625

00:27:20,130 --> 00:27:24,120

kids yes it's up to about 90 but in

626

00:27:22,440 --> 00:27:25,950

adults it's down to around eleven

627

00:27:24,119 --> 00:27:27,479

percent so it's likely that it's the

628
00:27:25,950 --> 00:27:29,220
adults who haven't had their boosters

629
00:27:27,480 --> 00:27:31,288
that are responsible for the resurgence

630
00:27:29,220 --> 00:27:32,700
of whooping cough but of course you know

631
00:27:31,288 --> 00:27:34,440
there's lots of side effects of vaccines

632
00:27:32,700 --> 00:27:38,909
we know for example that vaccines cause

633
00:27:34,440 --> 00:27:40,860
autism Oh Richard you've opened a

634
00:27:38,909 --> 00:27:43,890
Pandora's box there we know that

635
00:27:40,859 --> 00:27:45,808
vaccines don't cause autism actually but

636
00:27:43,890 --> 00:27:47,280
isn't it pernicious the way that stays

637
00:27:45,808 --> 00:27:48,899
despite evidence and you look at

638
00:27:47,279 --> 00:27:50,759
Scandinavian evidence and you look at

639
00:27:48,900 --> 00:27:53,038
you look at the evidence that it came

640
00:27:50,759 --> 00:27:55,259
from originally and how Lancet has come

641
00:27:53,038 --> 00:28:00,119
out and said this was biased this is

642
00:27:55,259 --> 00:28:01,500
been completely discredited and yet it

643
00:28:00,119 --> 00:28:03,658
sticks doesn't appear I guess because

644
00:28:01,500 --> 00:28:06,240
people with kids with autism a desperate

645
00:28:03,659 --> 00:28:08,070
to find out why and there's a smoking

646
00:28:06,240 --> 00:28:09,990
gun so someone somehow believes it's

647
00:28:08,069 --> 00:28:12,000
immunization well I think there's two

648
00:28:09,990 --> 00:28:14,038
reasons one of them is that we don't

649
00:28:12,000 --> 00:28:17,819
know yet exactly what causes autism

650
00:28:14,038 --> 00:28:20,490
there's no cure for autism also the time

651
00:28:17,819 --> 00:28:21,990
of onset or diagnosis of autism Cohen

652
00:28:20,490 --> 00:28:25,410
sides with the time that kids are

653
00:28:21,990 --> 00:28:27,900
receiving quite a few vaccinations so it

654
00:28:25,410 --> 00:28:29,519
looks if someone if the child gets a

655
00:28:27,900 --> 00:28:32,429
vaccination and then they're diagnosed

656

00:28:29,519 --> 00:28:34,230
with autism that's a people make their

657
00:28:32,429 --> 00:28:35,550
connection well it must be the vaccine

658
00:28:34,230 --> 00:28:37,829
because they were fine before they got

659
00:28:35,549 --> 00:28:39,389
that and of course that is a connection

660
00:28:37,829 --> 00:28:41,369
that people will make but it's not the

661
00:28:39,390 --> 00:28:43,380
case what do we say correlation isn't

662
00:28:41,369 --> 00:28:45,029
cause it's not equals causation yeah I

663
00:28:43,380 --> 00:28:47,040
mean it's like saying I go to bed every

664
00:28:45,029 --> 00:28:48,569
night and the Sun comes up in the

665
00:28:47,039 --> 00:28:50,819
morning therefore I cause the Sun to

666
00:28:48,569 --> 00:28:52,710
come up well no that's going to happen

667
00:28:50,819 --> 00:28:54,869
anyway there's no relation but you

668
00:28:52,710 --> 00:28:56,759
didn't cause it yeah Rachel Dunlop is

669
00:28:54,869 --> 00:28:58,500
heading to a postdoctoral fellow at the

670
00:28:56,759 --> 00:29:00,359

University of Technology in Sydney where

671

00:28:58,500 --> 00:29:01,579

she is she written columns for the

672

00:29:00,359 --> 00:29:03,539

conversation that we're having

673

00:29:01,579 --> 00:29:05,720

conversation about she's also vice

674

00:29:03,539 --> 00:29:07,409

president of the Australian skeptics

675

00:29:05,720 --> 00:29:10,500

incorporated as opposed to Vince

676

00:29:07,410 --> 00:29:12,590

Association and her study of fielder

677

00:29:10,500 --> 00:29:14,640

study has been immunization and

678

00:29:12,589 --> 00:29:15,899

immunology you know it's with that in

679

00:29:14,640 --> 00:29:19,350

mind that we're chatting about the rates

680

00:29:15,900 --> 00:29:22,110

of immunization in Australia why is this

681

00:29:19,349 --> 00:29:24,299

anyone's concern you know my kid is my

682

00:29:22,109 --> 00:29:25,949

kid my choices my choice shouldn't be of

683

00:29:24,299 --> 00:29:29,730

concern to you and your vaccinated

684

00:29:25,950 --> 00:29:31,200

choice yeah I think a vaccination is

685
00:29:29,730 --> 00:29:33,240
more than a personal choice really its

686
00:29:31,200 --> 00:29:36,029
community responsibility and the reason

687
00:29:33,240 --> 00:29:38,250
for that is that people that can't get

688
00:29:36,029 --> 00:29:40,470
fully that can't get vaccinated do exist

689
00:29:38,250 --> 00:29:42,420
in our community there are children who

690
00:29:40,470 --> 00:29:44,670
maybe are too young to have received all

691
00:29:42,420 --> 00:29:46,679
their vaccinations and so until they've

692
00:29:44,670 --> 00:29:49,050
got their entire course of childhood

693
00:29:46,679 --> 00:29:50,910
schedule they are still vulnerable and

694
00:29:49,049 --> 00:29:53,909
they're still likely to catch

695
00:29:50,910 --> 00:29:56,040
vaccine-preventable diseases sorry yeah

696
00:29:53,910 --> 00:29:58,140
I can example that phase in ballarat Fey

697
00:29:56,039 --> 00:29:59,369
you know all about someone catching a

698
00:29:58,140 --> 00:30:02,009
disease when you're too young to be

699
00:29:59,369 --> 00:30:04,529
vaccinated don't you yes my grandson was

700
00:30:02,009 --> 00:30:06,390
this and two months old when he came

701
00:30:04,529 --> 00:30:08,569
contact with a child who had not been

702
00:30:06,390 --> 00:30:13,170
vaccinated and obviously was carrying

703
00:30:08,569 --> 00:30:14,939
the germ whatever and we need yet he

704
00:30:13,170 --> 00:30:18,750
nearly died he was in and out of

705
00:30:14,940 --> 00:30:21,029
hospital for a year it was a being of

706
00:30:18,750 --> 00:30:23,910
pattern this was whooping cough in soft

707
00:30:21,029 --> 00:30:26,009
yeah it is the most horrific thing to

708
00:30:23,910 --> 00:30:28,290
watch because they literally stopped

709
00:30:26,009 --> 00:30:31,200
breathing and they turn blue and this

710
00:30:28,289 --> 00:30:33,778
tiny little baby of was just appalling

711
00:30:31,200 --> 00:30:36,889
so even if there was

712
00:30:33,778 --> 00:30:40,048
you know a chance I couldn't countenance

713

00:30:36,888 --> 00:30:44,728
people not having it issues we've had

714
00:30:40,048 --> 00:30:46,319
our boosters subsequent children but you

715
00:30:44,729 --> 00:30:49,499
know you look at a two month old child

716
00:30:46,319 --> 00:30:50,908
and I remember hearing on Reds program

717
00:30:49,499 --> 00:30:53,249
one time he was talking to a doctor

718
00:30:50,909 --> 00:30:56,460
whose own child was in that same

719
00:30:53,249 --> 00:30:58,499
situation and it was exactly the same

720
00:30:56,460 --> 00:31:00,298
time which is but these are people

721
00:30:58,499 --> 00:31:01,858
who've made a choice without seeing the

722
00:31:00,298 --> 00:31:05,009
wider picture that's impact on the

723
00:31:01,858 --> 00:31:07,348
society they live in rachel is probably

724
00:31:05,009 --> 00:31:09,058
outside our scope to to start to have a

725
00:31:07,348 --> 00:31:10,468
philosophical discussion event are we

726
00:31:09,058 --> 00:31:12,989
thinking of ourselves too much as a

727
00:31:10,469 --> 00:31:15,808

society unless about the needs of

728

00:31:12,989 --> 00:31:17,729

society in general and or does it lead

729

00:31:15,808 --> 00:31:19,678

us on to this kind of thinking but that

730

00:31:17,729 --> 00:31:22,649

heard let's talk for a moment about herd

731

00:31:19,679 --> 00:31:24,719

immunity what is that yeah well I prefer

732

00:31:22,648 --> 00:31:26,038

to call it community immunity Richard

733

00:31:24,719 --> 00:31:28,409

because it sounds a bit more warm and

734

00:31:26,038 --> 00:31:30,658

fuzzy and basically it means that we

735

00:31:28,409 --> 00:31:32,700

need a level of vaccination in the

736

00:31:30,659 --> 00:31:34,679

community to prevent the outbreak of

737

00:31:32,700 --> 00:31:36,119

disease and that varies for different

738

00:31:34,679 --> 00:31:38,729

vaccines it varies for different

739

00:31:36,118 --> 00:31:40,978

diseases but if we have roughly ninety

740

00:31:38,729 --> 00:31:43,229

five percent of the population immunized

741

00:31:40,979 --> 00:31:45,239

against a certain disease then there's

742
00:31:43,229 --> 00:31:47,249
no opportunity for it to have outbreaks

743
00:31:45,239 --> 00:31:49,710
and to spread through the community so

744
00:31:47,249 --> 00:31:52,588
we call this community immunity and that

745
00:31:49,710 --> 00:31:54,419
allows us to protect those like what

746
00:31:52,588 --> 00:31:56,579
Faye was referring to her grandson who

747
00:31:54,419 --> 00:31:58,109
got pertussis people that can't be

748
00:31:56,579 --> 00:32:00,718
vaccinated who may have cancer or

749
00:31:58,108 --> 00:32:03,378
receiving chemotherapy elderly people

750
00:32:00,719 --> 00:32:05,969
who are particularly susceptible to

751
00:32:03,378 --> 00:32:08,699
vaccine-preventable diseases and this

752
00:32:05,969 --> 00:32:10,499
stops these outbreaks from starting and

753
00:32:08,700 --> 00:32:12,028
we can when this herd immunity or

754
00:32:10,499 --> 00:32:13,379
community I mean that he breaks down

755
00:32:12,028 --> 00:32:14,909
that's when we see these

756
00:32:13,378 --> 00:32:16,558
vaccine-preventable disease of course

757
00:32:14,909 --> 00:32:18,869
before it breaks down there's a certain

758
00:32:16,558 --> 00:32:20,848
number who can slip stream the herd by

759
00:32:18,868 --> 00:32:23,968
not having it done but figuring that

760
00:32:20,848 --> 00:32:26,038
I've on LC I need some it is my child

761
00:32:23,969 --> 00:32:28,080
yeah they're relying on the herd if you

762
00:32:26,038 --> 00:32:30,179
like to protect themselves and so this

763
00:32:28,079 --> 00:32:32,098
is when people will say well my child

764
00:32:30,179 --> 00:32:34,379
has never been vaccinated and he or she

765
00:32:32,098 --> 00:32:35,968
is still very healthy well in most cases

766
00:32:34,378 --> 00:32:38,189
you're relying on the fact that everyone

767
00:32:35,969 --> 00:32:41,580
else around you is vaccine don't go to

768
00:32:38,190 --> 00:32:45,298
parts of Africa and not ours the same

769
00:32:41,579 --> 00:32:46,678
man is intuitive hey Graham hello Graham

770

00:32:45,298 --> 00:32:47,839
what were you what did you want to say

771
00:32:46,679 --> 00:32:51,240
about the Italian Court

772
00:32:47,839 --> 00:32:54,419
the italian court found that the MMR

773
00:32:51,240 --> 00:32:59,430
vaccine causes autism what you is that

774
00:32:54,420 --> 00:33:03,029
that is 2012 so in your mind what does

775
00:32:59,430 --> 00:33:05,190
that mean that means that when the child

776
00:33:03,029 --> 00:33:07,170
when they had the vaccine and they go

777
00:33:05,190 --> 00:33:09,720
home and they their crook the next day

778
00:33:07,170 --> 00:33:13,110
and they say well it's just a case of

779
00:33:09,720 --> 00:33:15,059
it's coincidental that it is not are you

780
00:33:13,109 --> 00:33:16,289
taking that decision if you've got the

781
00:33:15,059 --> 00:33:18,000
decision right against any other

782
00:33:16,289 --> 00:33:19,259
evidence do would that mean that for

783
00:33:18,000 --> 00:33:21,539
example you wouldn't have your kids

784
00:33:19,259 --> 00:33:23,640

vaccinated because of that I time case

785

00:33:21,539 --> 00:33:25,829

are very careful about any vaccines that

786

00:33:23,640 --> 00:33:27,330

all would give them so what would what

787

00:33:25,829 --> 00:33:31,079

does that mean being very careful or

788

00:33:27,329 --> 00:33:34,799

what would you do and just just if I can

789

00:33:31,079 --> 00:33:36,960

digress so attorneys for the Bush

790

00:33:34,799 --> 00:33:39,629

administration asked a federal court on

791

00:33:36,960 --> 00:33:43,049

Monday to order the documents on

792

00:33:39,630 --> 00:33:45,390

hundreds of cases of autism allegedly

793

00:33:43,049 --> 00:33:49,289

caused by childhood vaccines to be kept

794

00:33:45,390 --> 00:33:51,210

from the public Ryan which comes it back

795

00:33:49,289 --> 00:33:52,619

to it how would you judge back to the

796

00:33:51,210 --> 00:33:54,900

question how would you judge which

797

00:33:52,619 --> 00:33:56,459

vaccines you said you'd be very careful

798

00:33:54,900 --> 00:33:59,160

how does that work what would you do

799
00:33:56,460 --> 00:34:03,690
well you know I mean they can just keep

800
00:33:59,160 --> 00:34:04,800
inventing vaccines right so yeah but I'm

801
00:34:03,690 --> 00:34:06,870
getting down to how would you make the

802
00:34:04,799 --> 00:34:08,730
choice about which vaccines you'd give

803
00:34:06,869 --> 00:34:11,219
your children in which you wouldn't I

804
00:34:08,730 --> 00:34:14,130
would be would be very over to my

805
00:34:11,219 --> 00:34:17,089
homework and your homework would be

806
00:34:14,130 --> 00:34:21,360
better than medical authorities because

807
00:34:17,090 --> 00:34:23,519
because it would be my only but ready

808
00:34:21,360 --> 00:34:26,490
yeah but Richard if I can also just as a

809
00:34:23,519 --> 00:34:28,860
Japanese had a very hard death rate in

810
00:34:26,489 --> 00:34:30,799
children and they withdrew all vaccines

811
00:34:28,860 --> 00:34:33,630
until they were two years of age and

812
00:34:30,800 --> 00:34:37,370
then I have one I think the lowest death

813
00:34:33,630 --> 00:34:39,720
rate among entrance in the world okay

814
00:34:37,369 --> 00:34:41,489
these are a lot of interesting stats and

815
00:34:39,719 --> 00:34:43,829
and they're reworkings of a whole lot of

816
00:34:41,489 --> 00:34:45,719
others I guess what causes my concern is

817
00:34:43,829 --> 00:34:47,849
the assumption that you will research

818
00:34:45,719 --> 00:34:49,409
better than any medical facility but

819
00:34:47,849 --> 00:34:51,449
let's see what rachel has to say Rachel

820
00:34:49,409 --> 00:34:53,309
grams had a chat about what he feels and

821
00:34:51,449 --> 00:34:55,919
he's on yeah well let's touch on the

822
00:34:53,309 --> 00:34:57,599
Italian Court first of all and I think

823
00:34:55,920 --> 00:34:59,130
the difference between evidence you have

824
00:34:57,599 --> 00:35:01,509
in a court and evidence that you get

825
00:34:59,130 --> 00:35:03,460
scientifically is very very different

826
00:35:01,510 --> 00:35:06,250
so in terms of for example there's a

827

00:35:03,460 --> 00:35:07,659
vaccine court in the US where people can

828
00:35:06,250 --> 00:35:09,789
go if they believe their child has been

829
00:35:07,659 --> 00:35:12,129
injured by a vaccine and the evidence

830
00:35:09,789 --> 00:35:15,820
required for people to get compensation

831
00:35:12,130 --> 00:35:17,590
is 50% and a feather which means just a

832
00:35:15,820 --> 00:35:20,440
little bit more than fifty percent

833
00:35:17,590 --> 00:35:23,230
that's designed to compensate parents

834
00:35:20,440 --> 00:35:25,269
but it's not scientifically decided so

835
00:35:23,230 --> 00:35:28,659
you might also recall recently that the

836
00:35:25,269 --> 00:35:30,190
italian court through seismologists into

837
00:35:28,659 --> 00:35:32,589
jail because they didn't predict an

838
00:35:30,190 --> 00:35:34,720
earthquake so you can look at the

839
00:35:32,590 --> 00:35:36,130
scientific evidence to show that MMR

840
00:35:34,719 --> 00:35:38,230
doesn't cause autism which is

841
00:35:36,130 --> 00:35:40,510

overwhelming and we now have many many

842

00:35:38,230 --> 00:35:43,360

studies showing that or you can look at

843

00:35:40,510 --> 00:35:45,490

the the decision of a court which is not

844

00:35:43,360 --> 00:35:47,410

a scientific decision I know which side

845

00:35:45,489 --> 00:35:49,629

I'm going to go with the Japanese study

846

00:35:47,409 --> 00:35:51,789

who they removed everything and the

847

00:35:49,630 --> 00:35:55,900

fatalities went down well they certainly

848

00:35:51,789 --> 00:35:58,000

removed MMR for an in mid nineteen

849

00:35:55,900 --> 00:35:59,980

ninety-three they stopped using the

850

00:35:58,000 --> 00:36:02,409

measles mumps rubella rubella vaccine

851

00:35:59,980 --> 00:36:04,019

for a period of time because they had a

852

00:36:02,409 --> 00:36:06,399

lot of side effects with that particular

853

00:36:04,019 --> 00:36:07,809

MMR vaccine which wasn't being used in

854

00:36:06,400 --> 00:36:10,720

the rest of the world by the way and

855

00:36:07,809 --> 00:36:13,420

interestingly if you thought that the

856
00:36:10,719 --> 00:36:15,009
MMR was causing autism once the Japanese

857
00:36:13,420 --> 00:36:17,170
removed it you would think that autism

858
00:36:15,010 --> 00:36:20,710
would drop dramatically or guess what

859
00:36:17,170 --> 00:36:22,570
happened Richard MMR cases sorry autism

860
00:36:20,710 --> 00:36:23,980
cases continued to rise yeah you'll

861
00:36:22,570 --> 00:36:26,050
notice the evidence he was giving then

862
00:36:23,980 --> 00:36:28,210
said our fatalities increased he didn't

863
00:36:26,050 --> 00:36:30,220
mention that all to autism because as we

864
00:36:28,210 --> 00:36:32,019
know the autism increased it's

865
00:36:30,219 --> 00:36:33,730
interesting is not and I what I find

866
00:36:32,019 --> 00:36:35,679
fascinating is people still argue and go

867
00:36:33,730 --> 00:36:38,139
nod be very careful do my own research

868
00:36:35,679 --> 00:36:41,949
on the internet which is so much better

869
00:36:38,139 --> 00:36:43,569
than say I don't know yeah medical

870
00:36:41,949 --> 00:36:46,210
science during their own who've trained

871
00:36:43,570 --> 00:36:47,800
to do it I just I find that breathtaking

872
00:36:46,210 --> 00:36:50,500
that people can look you in the eye on

873
00:36:47,800 --> 00:36:52,870
go yeah I'd look it up myself and I'd do

874
00:36:50,500 --> 00:36:54,489
it better it's fascinating Rachel thank

875
00:36:52,869 --> 00:36:56,049
you so much I do appreciate Rachel

876
00:36:54,489 --> 00:36:57,789
Dunlop has been who you've been chatting

877
00:36:56,050 --> 00:36:59,500
to a postdoctoral fellow at the

878
00:36:57,789 --> 00:37:01,650
University of Technology in Sydney where

879
00:36:59,500 --> 00:37:04,650
she has for many years studied

880
00:37:01,650 --> 00:37:04,650
ethnomethodology

881
00:37:11,510 --> 00:37:15,770
Rachel thank you so much a fresh air

882
00:37:17,389 --> 00:37:19,449
you

883
00:37:23,139 --> 00:37:28,029
hi I'm Finn and I'm Rebecca and where

884

00:37:25,900 --> 00:37:29,800
the skipper cons skipper Collins is an

885
00:37:28,030 --> 00:37:31,480
Irish podcast by the Dublin skeptics

886
00:37:29,800 --> 00:37:33,039
society it takes a conversational

887
00:37:31,480 --> 00:37:34,300
reverent look at science news and

888
00:37:33,039 --> 00:37:37,809
skeptical topics from an Irish

889
00:37:34,300 --> 00:37:40,830
perspective you can find us at WWDC

890
00:37:37,809 --> 00:37:40,829
Afrikaans calm

891
00:37:41,528 --> 00:37:44,889
he's strong

892
00:37:47,630 --> 00:37:54,829
here's my not spooky action at a

893
00:37:52,289 --> 00:37:54,829
distance

894
00:37:55,489 --> 00:38:00,719
well i'm here at skeptics in the pub a

895
00:37:58,739 --> 00:38:01,858
lot of people at the bar because dr. H

896
00:38:00,719 --> 00:38:03,569
is not here there's a bit of extra room

897
00:38:01,858 --> 00:38:05,549
and there's a few new people who haven't

898
00:38:03,570 --> 00:38:07,260

been long before sir what's your name my

899

00:38:05,550 --> 00:38:10,050

name is Luke Egan you here for the first

900

00:38:07,260 --> 00:38:12,859

time why is that Luke my friend invited

901

00:38:10,050 --> 00:38:15,630

me on Facebook so there's an example of

902

00:38:12,858 --> 00:38:16,980

new forms of media getting people

903

00:38:15,630 --> 00:38:18,420

involved I guess and how did they know

904

00:38:16,980 --> 00:38:20,039

to invite you it's just a blanket

905

00:38:18,420 --> 00:38:21,900

invitation or have you been skeptical

906

00:38:20,039 --> 00:38:24,269

doubt something in the past I've always

907

00:38:21,900 --> 00:38:26,338

been a skeptic for my whole adult life

908

00:38:24,269 --> 00:38:29,699

and I used to be a subscriber to the

909

00:38:26,338 --> 00:38:32,429

Australian skeptic magazine I should

910

00:38:29,699 --> 00:38:34,439

probably resubscribe well maybe the

911

00:38:32,429 --> 00:38:36,960

online version maybe yeah yeah maybe

912

00:38:34,440 --> 00:38:39,088

download version would be good so I

913
00:38:36,960 --> 00:38:41,130
think he just knew that I would probably

914
00:38:39,088 --> 00:38:43,199
find it worthwhile and I have had a very

915
00:38:41,130 --> 00:38:44,640
good yeah we've got the question of the

916
00:38:43,199 --> 00:38:46,710
week coming up for you but first of all

917
00:38:44,639 --> 00:38:48,690
what's your specialty area what's the

918
00:38:46,710 --> 00:38:50,070
bit of skepticism to get your goat

919
00:38:48,690 --> 00:38:52,400
what's the one you're interested in oh

920
00:38:50,070 --> 00:38:56,660
well I come from a psychology background

921
00:38:52,400 --> 00:38:59,760
so I'm pretty skeptical of various

922
00:38:56,659 --> 00:39:02,730
parapsychological claims you know and

923
00:38:59,760 --> 00:39:05,250
things in in the area of the mind and

924
00:39:02,730 --> 00:39:07,710
the brain and all the kinds of misguided

925
00:39:05,250 --> 00:39:10,019
ideas that go on in that area well one

926
00:39:07,710 --> 00:39:12,630
of them are just pulling out of my jeans

927
00:39:10,019 --> 00:39:15,869
is perhaps the alien abduction theory

928
00:39:12,630 --> 00:39:17,099
and people who have sleep wake sleeping

929
00:39:15,869 --> 00:39:18,660
and they have and they mentioned that

930
00:39:17,099 --> 00:39:19,859
they've injected by aliens when they're

931
00:39:18,659 --> 00:39:21,858
paralyzed would that be part of a

932
00:39:19,858 --> 00:39:26,909
psychological situation was that not

933
00:39:21,858 --> 00:39:28,739
definitely it is also a lot of in the

934
00:39:26,909 --> 00:39:32,519
medical field I work at a Medical

935
00:39:28,739 --> 00:39:34,769
Institute and a lot of sleep because you

936
00:39:32,519 --> 00:39:36,210
don't work at the ponds Institute do you

937
00:39:34,769 --> 00:39:37,829
because I've seen the ponds Institute on

938
00:39:36,210 --> 00:39:39,838
television well as women wearing the

939
00:39:37,829 --> 00:39:42,269
white lab coats doing the makeup stuff

940
00:39:39,838 --> 00:39:45,960
you're not a pond I don't know that our

941

00:39:42,269 --> 00:39:47,250
hands there okay so check yeah but if

942
00:39:45,960 --> 00:39:50,099
you ask the sleep physician they can

943
00:39:47,250 --> 00:39:52,360
tell you all about the

944
00:39:50,099 --> 00:39:54,309
forgive me by murdering the term but

945
00:39:52,360 --> 00:39:55,960
it's like hypnagogic or hypnagogic

946
00:39:54,309 --> 00:39:57,579
hallucinations or something oh that's

947
00:39:55,960 --> 00:40:00,369
pretty close to it sound like that yeah

948
00:39:57,579 --> 00:40:02,170
and what's the psychological area that's

949
00:40:00,369 --> 00:40:04,449
closest to your heart that intersects

950
00:40:02,170 --> 00:40:09,400
with the skepticism I suppose it would

951
00:40:04,449 --> 00:40:14,259
be trying to unravel the confusion

952
00:40:09,400 --> 00:40:15,960
around what role the what role

953
00:40:14,260 --> 00:40:17,940
neuroscience can play in our

954
00:40:15,960 --> 00:40:20,500
understanding of behavior and

955
00:40:17,940 --> 00:40:23,470

psychological states so how do you feel

956

00:40:20,500 --> 00:40:25,690

when you see a TED talk about the

957

00:40:23,469 --> 00:40:27,279

consciousness someone like Rupert

958

00:40:25,690 --> 00:40:29,559

Sheldrake getting up there and saying

959

00:40:27,280 --> 00:40:31,840

that there's a creek cognition of images

960

00:40:29,559 --> 00:40:33,639

and that he's evidence shows that how do

961

00:40:31,840 --> 00:40:35,710

you feel about that oh yeah that reminds

962

00:40:33,639 --> 00:40:37,359

you of this debacle in one of the most

963

00:40:35,710 --> 00:40:38,559

prestigious psych journals the journal

964

00:40:37,360 --> 00:40:41,370

of personality and social psychology

965

00:40:38,559 --> 00:40:43,869

published that awful paper by

966

00:40:41,369 --> 00:40:47,019

what's-his-name that it wasn't Rupert

967

00:40:43,869 --> 00:40:48,279

shelter was it wasn't him yes but I

968

00:40:47,019 --> 00:40:50,610

think we know the one who talked yeah

969

00:40:48,280 --> 00:40:54,340

yeah and what was it purporting to prove

970
00:40:50,610 --> 00:40:56,680
precognition yeah and the thing is at no

971
00:40:54,340 --> 00:40:59,170
point in the paper did he posit a

972
00:40:56,679 --> 00:41:04,589
mechanism to explain the phenomenon and

973
00:40:59,170 --> 00:41:07,539
to me if you have a mechanism 'less idea

974
00:41:04,590 --> 00:41:11,140
then I would prefer chance as an

975
00:41:07,539 --> 00:41:14,349
explanation although as may be said to

976
00:41:11,139 --> 00:41:16,359
you by a non skeptic when Copernicus and

977
00:41:14,349 --> 00:41:18,639
Galileo originally making their

978
00:41:16,360 --> 00:41:20,650
observations there was planets moving in

979
00:41:18,639 --> 00:41:22,629
odd ways and they hadn't originally

980
00:41:20,650 --> 00:41:24,220
figured out why they were doing it so

981
00:41:22,630 --> 00:41:26,019
they hadn't worked out a mechanism

982
00:41:24,219 --> 00:41:27,699
originally either

983
00:41:26,019 --> 00:41:30,550
they hadn't but they didn't posit a

984
00:41:27,699 --> 00:41:31,599
brand new theory so they kind of SAT

985
00:41:30,550 --> 00:41:34,000
there and said here are the observations

986
00:41:31,599 --> 00:41:35,940
whereas this paper put forth

987
00:41:34,000 --> 00:41:38,530
observations and then said therefore

988
00:41:35,940 --> 00:41:40,510
precognition and that is pushing it way

989
00:41:38,530 --> 00:41:44,100
25 you if you had a mechanism to go with

990
00:41:40,510 --> 00:41:46,000
that hypothesis then okay might still be

991
00:41:44,099 --> 00:41:48,279
lunacy but at least you've got a

992
00:41:46,000 --> 00:41:50,019
mechanism that we can talk about without

993
00:41:48,280 --> 00:41:51,880
a mechanism i prefer chance as the best

994
00:41:50,019 --> 00:41:53,259
explanation and you've run it up for the

995
00:41:51,880 --> 00:41:55,360
first time you had skeptics at the pub

996
00:41:53,260 --> 00:41:57,310
at the coronation hotel and by the way

997
00:41:55,360 --> 00:41:59,320
the next one everybody is on thursday

998

00:41:57,309 --> 00:42:01,119
the sixth of June at the coronation

999
00:41:59,320 --> 00:42:03,070
hotel upstairs in Sydney come along

1000
00:42:01,119 --> 00:42:07,029
we'll see you then would you recommend

1001
00:42:03,070 --> 00:42:08,470
the time definitely yeah it was any what

1002
00:42:07,030 --> 00:42:11,110
it's pretty well oh it gets wilder from

1003
00:42:08,469 --> 00:42:12,339
here you have any wait wait till the

1004
00:42:11,110 --> 00:42:14,680
strippers arrived they're skeptical

1005
00:42:12,340 --> 00:42:16,059
strippers so they don't actually take

1006
00:42:14,679 --> 00:42:17,859
off their clothes they just tell you

1007
00:42:16,059 --> 00:42:20,110
that they might they're actually quantum

1008
00:42:17,860 --> 00:42:21,309
strippers quantum strippers here so if I

1009
00:42:20,110 --> 00:42:22,750
put them in a box and didn't observe

1010
00:42:21,309 --> 00:42:25,320
them would they be then they know they'd

1011
00:42:22,750 --> 00:42:27,159
be naked but you wouldn't see it okay

1012
00:42:25,320 --> 00:42:29,200

thanks Luke and have you got a website

1013

00:42:27,159 --> 00:42:31,210

or a blog or anything I'm go to everyone

1014

00:42:29,199 --> 00:42:33,159

we can debate you I do it's not

1015

00:42:31,210 --> 00:42:36,670

skeptically oriented but it's called

1016

00:42:33,159 --> 00:42:39,069

pseudo photos of cats haha it's a bit

1017

00:42:36,670 --> 00:42:40,720

more a little bit of hive rather than

1018

00:42:39,070 --> 00:42:44,740

that i have a blog called sydney

1019

00:42:40,719 --> 00:42:47,109

sidewinder wordpress com i talk about

1020

00:42:44,739 --> 00:42:48,909

how great Sydney years and things to do

1021

00:42:47,110 --> 00:42:51,460

around here so when you're not when

1022

00:42:48,909 --> 00:42:52,690

you're not a skeptical meaning there are

1023

00:42:51,460 --> 00:42:55,150

other things you can get up to as well

1024

00:42:52,690 --> 00:42:57,190

and because the question of the night it

1025

00:42:55,150 --> 00:43:00,639

should skeptic still be worried about

1026

00:42:57,190 --> 00:43:03,159

the issue of UFOs me I think that the

1027
00:43:00,639 --> 00:43:04,509
the reveal is just around the corner I'm

1028
00:43:03,159 --> 00:43:06,549
sure they're going to be coming up and

1029
00:43:04,510 --> 00:43:08,200
say yes it was all real all the time

1030
00:43:06,550 --> 00:43:09,880
it's been misinformation that's how I

1031
00:43:08,199 --> 00:43:13,089
feel how do you feel should skeptics be

1032
00:43:09,880 --> 00:43:16,240
still bothered with UFOs I think if we

1033
00:43:13,090 --> 00:43:18,100
have time that's fine but with things

1034
00:43:16,239 --> 00:43:20,109
like the anti-vaccine which is like

1035
00:43:18,099 --> 00:43:21,969
those guys have blood on their hands as

1036
00:43:20,110 --> 00:43:24,400
far as I'm concerned so if we can

1037
00:43:21,969 --> 00:43:25,899
prevent people from dying needlessly and

1038
00:43:24,400 --> 00:43:27,849
then still have time left over to debate

1039
00:43:25,900 --> 00:43:29,750
UFOs that's fine but if not let's

1040
00:43:27,849 --> 00:43:32,239
prioritize the real

1041
00:43:29,750 --> 00:43:33,739
life or death stuff I couldn't agree

1042
00:43:32,239 --> 00:43:35,389
more with you and that's why I'm usually

1043
00:43:33,739 --> 00:43:36,229
very silent on that issue because they

1044
00:43:35,389 --> 00:43:38,359
need people know what they're talking

1045
00:43:36,230 --> 00:43:41,750
about like dr. reaching people like me

1046
00:43:38,360 --> 00:43:44,450
coming out doing you can only damage the

1047
00:43:41,750 --> 00:43:47,050
cause I said that's a bit that's fair

1048
00:43:44,449 --> 00:43:49,730
enough yeah yeah I'll go home and I'll

1049
00:43:47,050 --> 00:43:51,230
give dr. ratio love support while she's

1050
00:43:49,730 --> 00:43:55,179
doing the blogging but I'll be watching

1051
00:43:51,230 --> 00:43:58,219
ancient aliens sounds good to me too

1052
00:43:55,179 --> 00:43:59,929
what what 70-plus people here are

1053
00:43:58,219 --> 00:44:01,399
upstairs at the coronation hotel of

1054
00:43:59,929 --> 00:44:02,779
course as I said the next one is on the

1055

00:44:01,400 --> 00:44:04,820
sixth of June come along and you can

1056
00:44:02,780 --> 00:44:07,010
meet people like Jessica's una hello

1057
00:44:04,820 --> 00:44:08,330
hello in DD how are you pretty good the

1058
00:44:07,010 --> 00:44:09,980
name might be singer but she's never

1059
00:44:08,329 --> 00:44:12,139
been on the voice or australia's Got

1060
00:44:09,980 --> 00:44:15,199
Talent although apparently you do in

1061
00:44:12,139 --> 00:44:17,869
certain areas oh well I'll just let my

1062
00:44:15,199 --> 00:44:21,019
reputation precede me in that regard tap

1063
00:44:17,869 --> 00:44:22,009
dancing now richard is our now richard

1064
00:44:21,019 --> 00:44:23,360
has sent the question for the night

1065
00:44:22,010 --> 00:44:25,130
should the skeptics still be worried

1066
00:44:23,360 --> 00:44:26,809
about UFOs and I was just talking to a

1067
00:44:25,130 --> 00:44:28,309
first-time skeptic here and he thought

1068
00:44:26,809 --> 00:44:30,049
that we've got bigger concerns like

1069
00:44:28,309 --> 00:44:31,340

vaccinations but do you feel it's

1070

00:44:30,050 --> 00:44:35,960

something a sceptic should be concerned

1071

00:44:31,340 --> 00:44:39,860

with at all oh well that's a hard one on

1072

00:44:35,960 --> 00:44:41,389

we we have a skeptic one of us one of

1073

00:44:39,860 --> 00:44:43,700

our people down in Melbourne Steve

1074

00:44:41,389 --> 00:44:45,920

Roberts has done a lot of work on the on

1075

00:44:43,699 --> 00:44:49,279

the UFO phenomena or the you know the

1076

00:44:45,920 --> 00:44:51,409

belief in in alien abductions and he

1077

00:44:49,280 --> 00:44:55,070

said he did a very interesting talk

1078

00:44:51,409 --> 00:44:58,099

about how the how the reports have

1079

00:44:55,070 --> 00:45:00,800

so-called at that abductions spike every

1080

00:44:58,099 --> 00:45:04,909

time there's an alien movie or a UFO

1081

00:45:00,800 --> 00:45:06,620

movie and it's it's some so it's it's I

1082

00:45:04,909 --> 00:45:09,170

think it's interesting from that point

1083

00:45:06,619 --> 00:45:11,599

of view I think it's it's a phenomenon

1084
00:45:09,170 --> 00:45:14,930
that we need to keep tabs on

1085
00:45:11,599 --> 00:45:17,750
it's also something that people do get

1086
00:45:14,929 --> 00:45:19,819
very distressed about so if we can help

1087
00:45:17,750 --> 00:45:22,460
them and reassure them that's good I

1088
00:45:19,820 --> 00:45:24,530
remember our former executive officer

1089
00:45:22,460 --> 00:45:27,019
Barry Williams he would always get phone

1090
00:45:24,530 --> 00:45:28,460
calls from very distressed people often

1091
00:45:27,019 --> 00:45:30,980
in the middle of the night when channel

1092
00:45:28,460 --> 00:45:33,590
7 had shown some bloody documentary or

1093
00:45:30,980 --> 00:45:36,679
other and they just wanted reassurance

1094
00:45:33,590 --> 00:45:40,300
and and if we can help and perhaps yo

1095
00:45:36,679 --> 00:45:42,769
just just give a rational explanation

1096
00:45:40,300 --> 00:45:45,530
yeah I think there's still a role for

1097
00:45:42,769 --> 00:45:48,079
that ok if anyone would like to go back

1098
00:45:45,530 --> 00:45:50,840
if they can I'll recap for them I spoke

1099
00:45:48,079 --> 00:45:53,150
to Steve novella about this issue at tam

1100
00:45:50,840 --> 00:45:55,220
Australia when he was out and and I said

1101
00:45:53,150 --> 00:45:57,530
there's a chance UFOs are real and he

1102
00:45:55,219 --> 00:45:58,969
said well it's so statistically smaller

1103
00:45:57,530 --> 00:46:01,820
they might be real but it's probably not

1104
00:45:58,969 --> 00:46:04,039
worth bothering to look and I Reese and

1105
00:46:01,820 --> 00:46:05,780
also I chatted with an Australian

1106
00:46:04,039 --> 00:46:07,699
researcher had gone around the world

1107
00:46:05,780 --> 00:46:10,460
following this at various spots around

1108
00:46:07,699 --> 00:46:11,929
the world of a hotspot so to me that

1109
00:46:10,460 --> 00:46:14,030
there is something going on that's worth

1110
00:46:11,929 --> 00:46:16,460
studying even if it's just psychological

1111
00:46:14,030 --> 00:46:18,860
or its cultural yes definitely from a

1112

00:46:16,460 --> 00:46:21,949
psychological cultural point of view but

1113
00:46:18,860 --> 00:46:26,059
in terms of you know do they come and

1114
00:46:21,949 --> 00:46:29,389
visit us I don't think so yeah so so so

1115
00:46:26,059 --> 00:46:32,570
yeah chasing going to these UFO

1116
00:46:29,389 --> 00:46:35,809
conventions and chasing watching

1117
00:46:32,570 --> 00:46:37,730
watching very grainy and and bad

1118
00:46:35,809 --> 00:46:40,039
photographs of nothing in particular

1119
00:46:37,730 --> 00:46:42,650
that's a bit of a waste of time but

1120
00:46:40,039 --> 00:46:44,570
little bit yeah I'm a big fan of out of

1121
00:46:42,650 --> 00:46:47,300
the blue the Fox films have been made

1122
00:46:44,570 --> 00:46:49,430
and I know what I saw now I know what I

1123
00:46:47,300 --> 00:46:52,789
saw could be actually retitled argument

1124
00:46:49,429 --> 00:46:54,379
from Authority because it's a and by the

1125
00:46:52,789 --> 00:46:58,369
way we just had a lecture here by Tim

1126
00:46:54,380 --> 00:47:00,019

mendham who said don't use that don't

1127

00:46:58,369 --> 00:47:01,460

bring up logical fallacies when you're

1128

00:47:00,019 --> 00:47:03,380

having a conversation with the media or

1129

00:47:01,460 --> 00:47:05,329

with people because people go look

1130

00:47:03,380 --> 00:47:07,670

pointy-headed don't they straight away

1131

00:47:05,329 --> 00:47:10,818

absolutely yeah oh yeah oh yeah and

1132

00:47:07,670 --> 00:47:12,739

basically it's a it's lawyers its pilots

1133

00:47:10,818 --> 00:47:14,958

it's politicians its various people it's

1134

00:47:12,739 --> 00:47:16,670

policemen Air Force people that you

1135

00:47:14,958 --> 00:47:18,409

would think would know what they see in

1136

00:47:16,670 --> 00:47:19,789

the sky that have seen unusual things

1137

00:47:18,409 --> 00:47:21,649

and that's what I know what I saw is

1138

00:47:19,789 --> 00:47:24,559

based around now do you think there's

1139

00:47:21,650 --> 00:47:27,979

any argument there ah well I'm a lawyer

1140

00:47:24,559 --> 00:47:32,719

and you know any anybody and you also

1141
00:47:27,978 --> 00:47:34,189
play one on TV well I wouldn't mind if I

1142
00:47:32,719 --> 00:47:36,139
wouldn't mind collecting a salary for

1143
00:47:34,190 --> 00:47:38,150
doing so open that would be good she SAT

1144
00:47:36,139 --> 00:47:40,190
just behind Ally McBeal if you if you

1145
00:47:38,150 --> 00:47:42,950
freeze the frame you can see her going

1146
00:47:40,190 --> 00:47:47,059
into the unisex toilet yep absolutely so

1147
00:47:42,949 --> 00:47:51,858
yeah so as a lawyer the the belief is

1148
00:47:47,059 --> 00:47:55,729
that firsthand evidence is best evidence

1149
00:47:51,858 --> 00:47:58,578
and firsthand testimony and what you see

1150
00:47:55,728 --> 00:48:01,608
is the best evidence but I think as

1151
00:47:58,579 --> 00:48:04,369
skeptics we all know how our brain can

1152
00:48:01,608 --> 00:48:08,420
fool us how our perceptions could fool

1153
00:48:04,369 --> 00:48:11,329
us and how that can be that can be very

1154
00:48:08,420 --> 00:48:13,579
misleading as a lawyer do you think that

1155
00:48:11,329 --> 00:48:16,519
perhaps William Shatner's performances

1156
00:48:13,579 --> 00:48:19,068
Danny crane is the greatest portrayal of

1157
00:48:16,518 --> 00:48:22,669
a lawyer on screen or on television ever

1158
00:48:19,068 --> 00:48:26,028
in the history of the world um I'm sorry

1159
00:48:22,670 --> 00:48:27,949
to admit I've never seen it well I know

1160
00:48:26,028 --> 00:48:30,048
isn't that if we get a lawyer who's

1161
00:48:27,949 --> 00:48:31,849
never watched Boston well that's it then

1162
00:48:30,048 --> 00:48:33,559
look I'm gonna go talk to someone else I

1163
00:48:31,849 --> 00:48:36,109
don't watch legal programs I'm sorry the

1164
00:48:33,559 --> 00:48:38,569
only the only 1i watches Rumble I love

1165
00:48:36,108 --> 00:48:40,369
rumble stop sniggering no no no look

1166
00:48:38,568 --> 00:48:42,858
look it's just as interesting as the

1167
00:48:40,369 --> 00:48:46,099
Duchess of duke street oh I remember

1168
00:48:42,858 --> 00:48:47,958
that oh my god I've been around some

1169

00:48:46,099 --> 00:48:50,028
more people thank you for your time no

1170
00:48:47,958 --> 00:48:52,248
worries take care may not Richard

1171
00:48:50,028 --> 00:48:56,028
Saunders is back from overseas he's been

1172
00:48:52,248 --> 00:48:57,919
banned from Czechoslovakia Norway there

1173
00:48:56,028 --> 00:49:00,079
was that incident in Trondheim that the

1174
00:48:57,920 --> 00:49:01,999
police are still looking for him for he

1175
00:49:00,079 --> 00:49:04,519
was seen sitting in a park talking to a

1176
00:49:01,998 --> 00:49:05,988
microphone for a while there and we're

1177
00:49:04,518 --> 00:49:07,639
actually in our special studio which is

1178
00:49:05,989 --> 00:49:09,889
the corridor see you later people thanks

1179
00:49:07,639 --> 00:49:11,538
for coming we had some lovely people

1180
00:49:09,889 --> 00:49:14,028
there and Richard Saunders how are you

1181
00:49:11,539 --> 00:49:15,140
jet-lagged may not look at now you had a

1182
00:49:14,028 --> 00:49:16,880
great time you've been around the world

1183
00:49:15,139 --> 00:49:17,960

being skeptical and I've been asking

1184

00:49:16,880 --> 00:49:20,088
people about you

1185

00:49:17,960 --> 00:49:22,190
what's your feeling about whether UFO

1186

00:49:20,088 --> 00:49:24,230
should still be tackled by the skeptical

1187

00:49:22,190 --> 00:49:26,088
movement or not oh I think it's they

1188

00:49:24,230 --> 00:49:27,829
should because it's a good way to for

1189

00:49:26,088 --> 00:49:30,559
young skeptics to cut their teeth you

1190

00:49:27,829 --> 00:49:34,219
know look at the investigations and how

1191

00:49:30,559 --> 00:49:38,000
to talk to people what what witness

1192

00:49:34,219 --> 00:49:39,889
accounts mean and all the rest of it but

1193

00:49:38,000 --> 00:49:42,650
it's something has been studied for so

1194

00:49:39,889 --> 00:49:44,838
many years now and it's still the the

1195

00:49:42,650 --> 00:49:47,269
results are pretty pretty crummy this

1196

00:49:44,838 --> 00:49:49,369
Carl Sagan would say but it's still it's

1197

00:49:47,269 --> 00:49:52,070
a worthwhile endeavor especially when

1198
00:49:49,369 --> 00:49:54,380
you're learning skepticism now I hark

1199
00:49:52,070 --> 00:49:56,210
back to the dirty disbelievers show that

1200
00:49:54,380 --> 00:49:57,980
I did with you dr. H E and Jamie

1201
00:49:56,210 --> 00:49:59,570
Leonardo and as you know Jamie Leonardo

1202
00:49:57,980 --> 00:50:01,760
is is very interested in investigating

1203
00:49:59,570 --> 00:50:03,588
this area and he brought up something

1204
00:50:01,760 --> 00:50:06,260
which I haven't thought about in that

1205
00:50:03,588 --> 00:50:07,940
most skeptics would automatically think

1206
00:50:06,260 --> 00:50:09,980
that we're looking at an alien life form

1207
00:50:07,940 --> 00:50:11,599
and it could be multi-dimensional or

1208
00:50:09,980 --> 00:50:13,159
something like that which I tend to go

1209
00:50:11,599 --> 00:50:15,769
with their of course there's no proof

1210
00:50:13,159 --> 00:50:18,379
for that hypothesis if you could call it

1211
00:50:15,769 --> 00:50:20,088
that do you think that they're me

1212
00:50:18,380 --> 00:50:21,380
thinking like that I need to put my head

1213
00:50:20,088 --> 00:50:23,239
in the bucket of water or not and you

1214
00:50:21,380 --> 00:50:24,619
Richard's got that smile on his face it

1215
00:50:23,239 --> 00:50:26,989
goes yeah we need to put my dad's head

1216
00:50:24,619 --> 00:50:28,720
in the bucket of water yeah well I know

1217
00:50:26,989 --> 00:50:31,279
that's perfectly you a perfectly good

1218
00:50:28,719 --> 00:50:33,679
line of thinking may not know it really

1219
00:50:31,280 --> 00:50:35,690
is I mean why would it have to be aliens

1220
00:50:33,679 --> 00:50:37,759
but why not think of is it a

1221
00:50:35,690 --> 00:50:40,700
multi-dimensional creature from Earth is

1222
00:50:37,760 --> 00:50:42,440
that someone from the future isn't also

1223
00:50:40,699 --> 00:50:44,210
I mean what you know I also think that

1224
00:50:42,440 --> 00:50:46,730
it's a phenomenon worth investigating

1225
00:50:44,210 --> 00:50:49,070
because if it isn't what it what if it's

1226

00:50:46,730 --> 00:50:50,990
a psychological or a cultural thing and

1227
00:50:49,070 --> 00:50:53,570
as I've mentioned my conversation with

1228
00:50:50,989 --> 00:50:54,919
steve novella at the TAM Australia he

1229
00:50:53,570 --> 00:50:56,359
thought it's so small it's not worth

1230
00:50:54,920 --> 00:50:58,849
investigating because of a percentage

1231
00:50:56,358 --> 00:51:01,338
chance of being realest so mean small

1232
00:50:58,849 --> 00:51:03,500
but I yeah I don't but I think that if

1233
00:51:01,338 --> 00:51:05,719
it is a cultural or psychological that

1234
00:51:03,500 --> 00:51:08,690
activity or event that's worth

1235
00:51:05,719 --> 00:51:10,639
investigating yes it is but not not so

1236
00:51:08,690 --> 00:51:13,010
much from what we might call a classical

1237
00:51:10,639 --> 00:51:15,319
skeptical point of view and I look at

1238
00:51:13,010 --> 00:51:16,880
Clark classical skepticism as dating

1239
00:51:15,320 --> 00:51:18,710
back from the 70s when it's all about

1240
00:51:16,880 --> 00:51:20,420

psychics and monsters and UFOs and

1241

00:51:18,710 --> 00:51:21,829

Bigfoot and all that sort of stuff I

1242

00:51:20,420 --> 00:51:23,869

love those sort of things in together

1243

00:51:21,829 --> 00:51:25,759

and obviously you'd be concerned that it

1244

00:51:23,869 --> 00:51:27,170

might distract the movement from other

1245

00:51:25,760 --> 00:51:29,359

ones you consider to be more

1246

00:51:27,170 --> 00:51:31,490

life-threatening such as a vaccination

1247

00:51:29,358 --> 00:51:35,210

and anti medical practices

1248

00:51:31,489 --> 00:51:36,229

well I guess there is an argument for

1249

00:51:35,210 --> 00:51:38,420

that but you know there are a lot of

1250

00:51:36,230 --> 00:51:40,579

skeptics especially a lot of young keen

1251

00:51:38,420 --> 00:51:42,170

skeptics who want to investigate these

1252

00:51:40,579 --> 00:51:44,360

things and I say good luck to them you

1253

00:51:42,170 --> 00:51:46,730

know fine go for it i I've got no

1254

00:51:44,360 --> 00:51:48,680

problem with that and have you got a

1255
00:51:46,730 --> 00:51:52,070
problem with me enjoying the entire

1256
00:51:48,679 --> 00:51:55,149
ancient alien series ah haven't you

1257
00:51:52,070 --> 00:51:57,710
listened to solar flare oh look and

1258
00:51:55,150 --> 00:51:59,780
sidebar people solar flare has come out

1259
00:51:57,710 --> 00:52:01,429
and I've been flooded with well actually

1260
00:51:59,780 --> 00:52:03,410
no emails but Richard might have got a

1261
00:52:01,429 --> 00:52:05,179
couple solar flare it's like commander

1262
00:52:03,409 --> 00:52:07,429
Saunders has done a fantastic job

1263
00:52:05,179 --> 00:52:09,799
Captain Saunders I was promoted you know

1264
00:52:07,429 --> 00:52:11,629
I did get a message about solar flare

1265
00:52:09,800 --> 00:52:13,789
and it said that you stole the show oh

1266
00:52:11,630 --> 00:52:15,980
here's three new people going party

1267
00:52:13,789 --> 00:52:17,509
later this is I'm talking to Richard

1268
00:52:15,980 --> 00:52:18,710
Saunders cuz he's an alcoholic you can't

1269
00:52:17,510 --> 00:52:22,280
chat to him later you got to get him

1270
00:52:18,710 --> 00:52:23,690
early still upright yes no they said

1271
00:52:22,280 --> 00:52:25,519
that you stole the show so there you go

1272
00:52:23,690 --> 00:52:27,440
well yeah I did and that's why it wasn't

1273
00:52:25,519 --> 00:52:30,139
out for a while I may not give it back

1274
00:52:27,440 --> 00:52:32,450
look it was a lot of fun to do and a lot

1275
00:52:30,139 --> 00:52:33,710
of work went into that people and there

1276
00:52:32,449 --> 00:52:35,509
might be another but believing me

1277
00:52:33,710 --> 00:52:37,639
Richard did a lot of work on that the

1278
00:52:35,510 --> 00:52:39,790
production and Stefan and everybody was

1279
00:52:37,639 --> 00:52:43,069
involved in it I'm a bit of a fan of

1280
00:52:39,789 --> 00:52:45,409
Elsa st you men will hello i enjoy

1281
00:52:43,070 --> 00:52:48,140
hearing novella he was just a novella

1282
00:52:45,409 --> 00:52:49,639
like he had that dr. evil touch about

1283

00:52:48,139 --> 00:52:51,170
him he did he hammed it up a bit which

1284
00:52:49,639 --> 00:52:54,230
was great and there's a lot of work

1285
00:52:51,170 --> 00:52:55,579
there may be another 180 a baby and look

1286
00:52:54,230 --> 00:52:57,320
before we finishes or anything we can

1287
00:52:55,579 --> 00:52:58,940
point to people are we're back here at

1288
00:52:57,320 --> 00:53:00,980
the coronation until I mentioned a few

1289
00:52:58,940 --> 00:53:02,990
time on the Thursday the sixth of June

1290
00:53:00,980 --> 00:53:05,179
it's upstairs at the coronation hotel in

1291
00:53:02,989 --> 00:53:06,769
Sydney it's the sixth of June is it no

1292
00:53:05,179 --> 00:53:08,480
that's the next one that's what I'm

1293
00:53:06,769 --> 00:53:10,789
saying it's the next one Sam I'm getting

1294
00:53:08,480 --> 00:53:12,559
people earlier me folks yes that's yes

1295
00:53:10,789 --> 00:53:14,809
we'll see you there okay spoon bending

1296
00:53:12,559 --> 00:53:18,559
lessons okay we're here with our

1297
00:53:14,809 --> 00:53:20,299

Aeronautics correspondent usually if if

1298

00:53:18,559 --> 00:53:22,699

you've seen any show that involves the

1299

00:53:20,300 --> 00:53:25,250

phrase black box so that's not an adult

1300

00:53:22,699 --> 00:53:26,750

movie or a video clip this guy's

1301

00:53:25,250 --> 00:53:29,539

probably seen it

1302

00:53:26,750 --> 00:53:32,239

I tend to read the accident reports more

1303

00:53:29,539 --> 00:53:34,219

than the then you mean they don't you

1304

00:53:32,239 --> 00:53:35,629

like the dramatizations know you know

1305

00:53:34,219 --> 00:53:37,489

the mother with the child and the guy

1306

00:53:35,630 --> 00:53:39,019

who helped invent the IBM computer and

1307

00:53:37,489 --> 00:53:42,109

then the this and that so okay i know i

1308

00:53:39,019 --> 00:53:43,849

know enough of them thinking that what

1309

00:53:42,110 --> 00:53:45,710

is your name sir much your website so we

1310

00:53:43,849 --> 00:53:50,029

can complain to you later my name is

1311

00:53:45,710 --> 00:53:51,800

Robin cleared and my website ok good

1312
00:53:50,030 --> 00:53:54,680
Lee's name goodness knows what will come

1313
00:53:51,800 --> 00:53:56,120
up but I I appear on Google a lot do you

1314
00:53:54,679 --> 00:53:58,579
think skeptics should still concern

1315
00:53:56,119 --> 00:54:01,250
themselves with the phenomena of UFOs or

1316
00:53:58,579 --> 00:54:03,500
is that you know so 10 years ago

1317
00:54:01,250 --> 00:54:05,059
personally I think that it it's the

1318
00:54:03,500 --> 00:54:07,130
major thing on my mind because I haven't

1319
00:54:05,059 --> 00:54:09,259
got the brainpower to work with the

1320
00:54:07,130 --> 00:54:12,349
vaccination issue but what do you think

1321
00:54:09,260 --> 00:54:14,330
about the rest of us I think come I mean

1322
00:54:12,349 --> 00:54:16,039
I always remember I suppose my

1323
00:54:14,329 --> 00:54:17,659
skepticism I'm something echoing

1324
00:54:16,039 --> 00:54:20,000
something that that rupee said on

1325
00:54:17,659 --> 00:54:22,670
skepticality once I think but a lot of

1326
00:54:20,000 --> 00:54:24,739
people get into skepticism from the

1327
00:54:22,670 --> 00:54:26,750
wonder of the mystery i remember all the

1328
00:54:24,739 --> 00:54:28,849
us-born kids books when I was in the

1329
00:54:26,750 --> 00:54:30,739
inner 70s use one book of UFOs which i

1330
00:54:28,849 --> 00:54:32,539
still have and the and all these things

1331
00:54:30,739 --> 00:54:34,669
and I think part and at the same time I

1332
00:54:32,539 --> 00:54:37,269
started becoming skeptical about things

1333
00:54:34,670 --> 00:54:40,099
but that was what the excitement was

1334
00:54:37,269 --> 00:54:41,539
Michael Shermer has said that the

1335
00:54:40,099 --> 00:54:43,190
paranormal is a gateway drug to

1336
00:54:41,539 --> 00:54:45,050
skepticism do you think that's true I

1337
00:54:43,190 --> 00:54:47,329
really thought in my I can only speak

1338
00:54:45,050 --> 00:54:49,580
for myself but I think so and I Mikkel

1339
00:54:47,329 --> 00:54:51,590
heard other people say that you know

1340

00:54:49,579 --> 00:54:53,539
people like sweepy say similar things I

1341
00:54:51,590 --> 00:54:55,329
think and it's also Benjamin Radford i

1342
00:54:53,539 --> 00:54:57,800
think was saying as Benjamin Radford

1343
00:54:55,329 --> 00:54:59,179
well I mean who told Matt what monster

1344
00:54:57,800 --> 00:55:00,530
talk and something that everyone loves

1345
00:54:59,179 --> 00:55:02,539
that fantastic and they're taking a

1346
00:55:00,530 --> 00:55:04,100
break for a couple of months are they

1347
00:55:02,539 --> 00:55:05,150
are yeah they're taking a break through

1348
00:55:04,099 --> 00:55:06,380
little journal saying that they got a

1349
00:55:05,150 --> 00:55:08,119
few things on I was going to interview

1350
00:55:06,380 --> 00:55:09,349
him do a thing on the show I think

1351
00:55:08,119 --> 00:55:12,679
they're actually taking a break so they

1352
00:55:09,349 --> 00:55:14,659
can avoid me interviewing them ah no

1353
00:55:12,679 --> 00:55:16,489
never never never oh there's something

1354
00:55:14,659 --> 00:55:18,319

there Benjamin Redford in a PhD or

1355

00:55:16,489 --> 00:55:19,519

something that's just like smoke screen

1356

00:55:18,320 --> 00:55:21,380

yeah you're definitely definitely he's

1357

00:55:19,519 --> 00:55:24,469

actually gone up to the mothership for a

1358

00:55:21,380 --> 00:55:27,170

short time yeah so what would you what

1359

00:55:24,469 --> 00:55:29,209

do you think when qualified pilots as in

1360

00:55:27,170 --> 00:55:31,280

the movie that I've I know what I saw

1361

00:55:29,210 --> 00:55:32,420

which is also known as an argument from

1362

00:55:31,280 --> 00:55:34,400

Authority

1363

00:55:32,420 --> 00:55:36,349

what do you think of that sort of thing

1364

00:55:34,400 --> 00:55:38,059

when qualified pilots see something in

1365

00:55:36,349 --> 00:55:39,949

the sky that seems to be flying around

1366

00:55:38,059 --> 00:55:41,000

quite close to them like the incident

1367

00:55:39,949 --> 00:55:43,250

that happened over the English Channel

1368

00:55:41,000 --> 00:55:45,500

well I actually remember one of the

1369
00:55:43,250 --> 00:55:47,000
first I was so into this when I was

1370
00:55:45,500 --> 00:55:48,710
young I add up there's a great book

1371
00:55:47,000 --> 00:55:50,690
called alien not over the antipathy

1372
00:55:48,710 --> 00:55:51,740
aliens over the Antipodes which went

1373
00:55:50,690 --> 00:55:53,780
into detail about frederick valentich

1374
00:55:51,739 --> 00:55:55,399
and so i was very excited when the

1375
00:55:53,780 --> 00:55:57,140
skeptic actually covered that story a

1376
00:55:55,400 --> 00:55:58,940
few years ago cuz i fascinate about that

1377
00:55:57,139 --> 00:56:01,069
when i was he was circling a large

1378
00:55:58,940 --> 00:56:02,059
object above him and the last thing we

1379
00:56:01,070 --> 00:56:04,490
heard from him with some sort of

1380
00:56:02,059 --> 00:56:07,369
metallic Clank as if he'd ran into it or

1381
00:56:04,489 --> 00:56:09,859
something I've yes well I think I I mean

1382
00:56:07,369 --> 00:56:11,329
yeah it fascinated me and I can remember

1383
00:56:09,860 --> 00:56:12,620
sort of squinting at airplanes

1384
00:56:11,329 --> 00:56:14,150
approaching Sydney Airport trying to

1385
00:56:12,619 --> 00:56:16,159
pretend that there were UFOs and making

1386
00:56:14,150 --> 00:56:18,860
paper models of them and you know this

1387
00:56:16,159 --> 00:56:21,859
is a UFO that I saw you know in inverted

1388
00:56:18,860 --> 00:56:24,440
commas so I can remember I do think it's

1389
00:56:21,860 --> 00:56:25,610
a gateway to skepticism because around

1390
00:56:24,440 --> 00:56:29,210
the same time I started reading I

1391
00:56:25,610 --> 00:56:32,480
remember the the book that was done by

1392
00:56:29,210 --> 00:56:33,829
Randy and and Dick Smith on the water

1393
00:56:32,480 --> 00:56:35,240
divining in Australia and I remember

1394
00:56:33,829 --> 00:56:37,159
that was in the school library so I'm

1395
00:56:35,239 --> 00:56:38,539
very thankful to the librarian at that

1396
00:56:37,159 --> 00:56:40,159
school for having that in the library

1397

00:56:38,539 --> 00:56:42,079
because that was a sort of a very early

1398
00:56:40,159 --> 00:56:45,079
start and you have a hell of an overdue

1399
00:56:42,079 --> 00:56:49,009
fee on that too I did give that one back

1400
00:56:45,079 --> 00:56:50,539
oh and of course I'm over near the

1401
00:56:49,010 --> 00:56:53,770
speaker let's just get down to some of

1402
00:56:50,539 --> 00:56:53,769
the music you can hear in the background

1403
00:56:53,929 --> 00:56:58,349
sure it's great but it's no Belinda

1404
00:56:56,039 --> 00:57:00,599
Carlisle people is it really who we got

1405
00:56:58,349 --> 00:57:02,190
here I may not I'm Nick I Nick pleased

1406
00:57:00,599 --> 00:57:04,199
to see you again tell us do you think

1407
00:57:02,190 --> 00:57:05,940
skeptic should still be interested in

1408
00:57:04,199 --> 00:57:08,579
the UFO phenomenon or it's something

1409
00:57:05,940 --> 00:57:11,220
that's headed today well UFOs there's

1410
00:57:08,579 --> 00:57:14,369
been the ancient alien astronaut

1411
00:57:11,219 --> 00:57:15,989

proponents oh yeah I love it when they

1412

00:57:14,369 --> 00:57:17,489

cut to Erich von Daniken and he's there

1413

00:57:15,989 --> 00:57:20,669

with the glass of scotch and the gold

1414

00:57:17,489 --> 00:57:23,789

ring that's fantastic i'm a Daniken fan

1415

00:57:20,670 --> 00:57:27,210

well you've got to have some someone to

1416

00:57:23,789 --> 00:57:29,489

criticize some target to pick on hmm you

1417

00:57:27,210 --> 00:57:31,289

know the crazy theories that every

1418

00:57:29,489 --> 00:57:34,649

single pyramid is pointing up towards

1419

00:57:31,289 --> 00:57:37,409

ancient UFOs and in other words your

1420

00:57:34,650 --> 00:57:38,970

favorite area of skepticism normally are

1421

00:57:37,409 --> 00:57:40,980

probably medicine I think that's one of

1422

00:57:38,969 --> 00:57:42,119

the big areas where people you know

1423

00:57:40,980 --> 00:57:44,760

right now there's this issue with a

1424

00:57:42,119 --> 00:57:46,349

measles outbreak and there's just it's

1425

00:57:44,760 --> 00:57:48,570

been going on for years that there's

1426
00:57:46,349 --> 00:57:51,389
been so much misinformation that we're

1427
00:57:48,570 --> 00:57:53,820
starting to finally see the real cause

1428
00:57:51,389 --> 00:57:55,619
have wanted the ultimate result with

1429
00:57:53,820 --> 00:57:58,260
real disease going around it's such a

1430
00:57:55,619 --> 00:58:00,809
big issue right now and also who we got

1431
00:57:58,260 --> 00:58:03,270
here Chris hello Chris are you a long

1432
00:58:00,809 --> 00:58:04,139
time skeptic medium time skeptical you

1433
00:58:03,269 --> 00:58:07,019
the guy who started the organization

1434
00:58:04,139 --> 00:58:10,469
with Dick Smith I've been a skeptic for

1435
00:58:07,019 --> 00:58:13,440
60-odd years hmm but I've actually been

1436
00:58:10,469 --> 00:58:15,509
associated with if you like the movement

1437
00:58:13,440 --> 00:58:19,070
for a few years coming to skeptic in the

1438
00:58:15,510 --> 00:58:22,020
pub at my entree was listening to

1439
00:58:19,070 --> 00:58:24,809
Richard and dr. ratio and skeptics ohm

1440
00:58:22,019 --> 00:58:26,099
and very early on in the piece what are

1441
00:58:24,809 --> 00:58:27,719
you making the show there's been three

1442
00:58:26,099 --> 00:58:29,069
hundred episodes is there something

1443
00:58:27,719 --> 00:58:30,569
that's stuck out in your mind or you gon

1444
00:58:29,070 --> 00:58:34,010
are these guys should lift their game

1445
00:58:30,570 --> 00:58:39,539
the NAS girls they used to be

1446
00:58:34,010 --> 00:58:42,300
no I to the line skeptic there are a

1447
00:58:39,539 --> 00:58:44,759
light in the darkness and sin to know

1448
00:58:42,300 --> 00:58:46,500
that there's people like you as we saw

1449
00:58:44,760 --> 00:58:49,440
when we had ten Australia or the

1450
00:58:46,500 --> 00:58:51,210
conference down in Melbourne exactly

1451
00:58:49,440 --> 00:58:54,329
it's nice to know and that's why I come

1452
00:58:51,210 --> 00:58:57,329
to skeptics in the pub one of the big

1453
00:58:54,329 --> 00:59:00,030
issues if you look at one of the great

1454

00:58:57,329 --> 00:59:02,099
if you like strengths and values of

1455
00:59:00,030 --> 00:59:06,300
religion is is a sense of community

1456
00:59:02,099 --> 00:59:08,400
fellowship this is my my wife goes to

1457
00:59:06,300 --> 00:59:11,039
church every week I've come to skeptics

1458
00:59:08,400 --> 00:59:12,358
in the pub every month and now you've

1459
00:59:11,039 --> 00:59:15,509
got me in addition we don't have to

1460
00:59:12,358 --> 00:59:18,150
dress up as much here either really well

1461
00:59:15,510 --> 00:59:21,359
being Catholic then undress out I have

1462
00:59:18,150 --> 00:59:24,030
fantastic hats and my wife doesn't wear

1463
00:59:21,358 --> 00:59:25,920
one I hope does the Pope's got the

1464
00:59:24,030 --> 00:59:27,059
benefit like like you know I mean you

1465
00:59:25,920 --> 00:59:28,500
know when he flies on the back of

1466
00:59:27,059 --> 00:59:32,819
powdered toast man that's some of the

1467
00:59:28,500 --> 00:59:35,730
best bits of ren and stimpie yeah I'd

1468
00:59:32,818 --> 00:59:38,519

love the popemobile back man would love

1469

00:59:35,730 --> 00:59:40,409

the popemobile look Adam West the true

1470

00:59:38,519 --> 00:59:42,809

Batman as a believer Adam West is the

1471

00:59:40,409 --> 00:59:44,129

one and only true Batman and the UFO

1472

00:59:42,809 --> 00:59:45,780

issue how do you feel about it because

1473

00:59:44,130 --> 00:59:49,200

early on in skepticism that would have

1474

00:59:45,780 --> 00:59:51,720

been one of the main ones yeah I I see

1475

00:59:49,199 --> 00:59:55,949

UFOs as being in there with all the

1476

00:59:51,719 --> 00:59:58,169

other conspiracy theories people will

1477

00:59:55,949 --> 01:00:00,659

look the more you prove that they don't

1478

00:59:58,170 --> 01:00:04,200

exist the more they believe that they

1479

01:00:00,659 --> 01:00:07,049

exist you reinforce this ends a

1480

01:00:04,199 --> 01:00:10,230

conspiracy but I think

1481

01:00:07,050 --> 01:00:15,769

III agree with our friend here that the

1482

01:00:10,230 --> 01:00:18,900

medical issues particularly the

1483
01:00:15,769 --> 01:00:20,460
anti-vaxxers to put it frankly they have

1484
01:00:18,900 --> 01:00:23,250
blood on their hands this is a

1485
01:00:20,460 --> 01:00:25,760
conspiracy theory that kills babies and

1486
01:00:23,250 --> 01:00:29,880
as a grandfather I find that absolutely

1487
01:00:25,760 --> 01:00:31,320
abhorrent have you had to step in if you

1488
01:00:29,880 --> 01:00:32,940
don't mind me asking on the personal

1489
01:00:31,320 --> 01:00:37,980
family level with this argument at all

1490
01:00:32,940 --> 01:00:41,820
or not absolutely not but my I've had my

1491
01:00:37,980 --> 01:00:45,750
wife at a school was approached by one

1492
01:00:41,820 --> 01:00:47,400
of the teachers on the young teachers

1493
01:00:45,750 --> 01:00:51,769
with her baby should i have the baby

1494
01:00:47,400 --> 01:00:57,450
immunized and i was able to give a few

1495
01:00:51,769 --> 01:00:59,820
websites having spoken to my Frank hero

1496
01:00:57,449 --> 01:01:03,239
or heroine I mean your dad say heroin

1497
01:00:59,820 --> 01:01:06,539
dr. Rashi and suggested that they look

1498
01:01:03,239 --> 01:01:08,489
up immunization rather than vaccination

1499
01:01:06,539 --> 01:01:11,730
and and you start looking at some

1500
01:01:08,489 --> 01:01:14,250
scientifically-based factual websites

1501
01:01:11,730 --> 01:01:16,469
and thankfully they had their child

1502
01:01:14,250 --> 01:01:18,239
backs neighbor you certainly stood up

1503
01:01:16,469 --> 01:01:20,129
the chapter you had your skeptical chops

1504
01:01:18,239 --> 01:01:21,569
going on then is there a website that

1505
01:01:20,130 --> 01:01:22,920
you've got or one that you think's good

1506
01:01:21,570 --> 01:01:24,510
that people should visit for science

1507
01:01:22,920 --> 01:01:26,550
you'd like to recommend to us well it's

1508
01:01:24,510 --> 01:01:28,860
not for science but I have a business am

1509
01:01:26,550 --> 01:01:29,940
I allowed to say my website look look if

1510
01:01:28,860 --> 01:01:31,140
we've got an issue with what you've been

1511

01:01:29,940 --> 01:01:36,000
saying yeah that's probably where we

1512
01:01:31,139 --> 01:01:37,769
should go Christian's com delay you well

1513
01:01:36,000 --> 01:01:39,539
look at last interview now spoken about

1514
01:01:37,769 --> 01:01:40,889
almost all the 70 people that were here

1515
01:01:39,539 --> 01:01:43,050
Tim do you think we should still bother

1516
01:01:40,889 --> 01:01:45,150
with UFOs bearing in mind that they are

1517
01:01:43,050 --> 01:01:47,580
real and erich von daniken is real as

1518
01:01:45,150 --> 01:01:49,680
well absolutely I've travelled in some

1519
01:01:47,579 --> 01:01:51,059
myself actually it was when you got

1520
01:01:49,679 --> 01:01:52,769
involved with the skeptical of spoke

1521
01:01:51,059 --> 01:01:54,719
workers and people with who've been in

1522
01:01:52,769 --> 01:01:56,789
the skeptical moon for quite a long time

1523
01:01:54,719 --> 01:01:58,319
that would have been one of the initial

1524
01:01:56,789 --> 01:02:00,329
issues you guys would have dealt with

1525
01:01:58,320 --> 01:02:02,580

yeah it was most definitely I think we

1526

01:02:00,329 --> 01:02:05,099

dealt with the the key issues that are

1527

01:02:02,579 --> 01:02:06,900

sort of troubling the world now UFOs

1528

01:02:05,099 --> 01:02:08,519

Bigfoot and Loch Ness monsters and

1529

01:02:06,900 --> 01:02:10,410

should we still bother with that should

1530

01:02:08,519 --> 01:02:12,869

skeptics to bother with that I say we

1531

01:02:10,409 --> 01:02:14,489

when you know you know you know you know

1532

01:02:12,869 --> 01:02:16,409

i love it Jen aliens you know i'm

1533

01:02:14,489 --> 01:02:20,519

watching the secret UFO history

1534

01:02:16,409 --> 01:02:22,319

mate I i I'm a loch ness monster fancier

1535

01:02:20,519 --> 01:02:25,110

I've been good luck that's about three

1536

01:02:22,320 --> 01:02:26,610

times I look and as people say if there

1537

01:02:25,110 --> 01:02:28,829

isn't a monster in there there should be

1538

01:02:26,610 --> 01:02:30,570

should be yes absolutely I've been to

1539

01:02:28,829 --> 01:02:32,789

the museum the museum's changed over the

1540
01:02:30,570 --> 01:02:35,010
years it started off as a really cool

1541
01:02:32,789 --> 01:02:36,840
little cottage which firmly believed in

1542
01:02:35,010 --> 01:02:38,010
Loch Ness monster it developed into a

1543
01:02:36,840 --> 01:02:38,970
bigger building and the bigger building

1544
01:02:38,010 --> 01:02:41,240
each time we got more some more

1545
01:02:38,969 --> 01:02:43,349
scientific and less interesting

1546
01:02:41,239 --> 01:02:45,359
obviously I bring back the Loch Ness

1547
01:02:43,349 --> 01:02:46,559
monster I say the only sign of the Loch

1548
01:02:45,360 --> 01:02:49,079
Ness monster I've seen in my business

1549
01:02:46,559 --> 01:02:51,329
there was a roadside Caravan selling

1550
01:02:49,079 --> 01:02:53,900
monster burgers but worried with worried

1551
01:02:51,329 --> 01:02:53,900
be hellishly

1552
01:03:03,608 --> 01:03:12,489
everyone this is trent brusky creator of

1553
01:03:07,088 --> 01:03:12,489
drop box sound or

1554
01:03:12,838 --> 01:03:19,239
Dropbox is a project that's dedicated to

1555
01:03:15,998 --> 01:03:22,058
supporting skeptical secular and science

1556
01:03:19,239 --> 01:03:24,548
podcasts or new tumors by creating

1557
01:03:22,059 --> 01:03:27,189
different music for their shows you can

1558
01:03:24,548 --> 01:03:29,559
hear me on such shows as skeptic ality

1559
01:03:27,188 --> 01:03:31,838
augments by Jeff wagon his college of

1560
01:03:29,559 --> 01:03:34,059
curiosity and dog will be paid along

1561
01:03:31,838 --> 01:03:37,650
with a few other great shows if you are

1562
01:03:34,059 --> 01:03:42,390
in need of any music please go to ww

1563
01:03:37,650 --> 01:03:46,499
Dropbox sound o RG also facebook.com

1564
01:03:42,389 --> 01:03:46,498
slash Dropbox

1565
01:03:59,599 --> 01:04:04,500
thank you for listening to the skeptic

1566
01:04:02,159 --> 01:04:06,690
zone I must say in the past week a

1567
01:04:04,500 --> 01:04:09,000
couple of days ago dr. H E and myself

1568

01:04:06,690 --> 01:04:12,119
performed our mystery investigators show

1569
01:04:09,000 --> 01:04:13,949
at a police school here in Sydney wow

1570
01:04:12,119 --> 01:04:16,559
what a great time we had and it struck

1571
01:04:13,949 --> 01:04:19,919
me when I was getting ready for the show

1572
01:04:16,559 --> 01:04:21,809
that that's the ninth year in a row the

1573
01:04:19,920 --> 01:04:26,400
mystery investigators have performed at

1574
01:04:21,809 --> 01:04:28,409
Abbot's Leigh and this year 2013 mux are

1575
01:04:26,400 --> 01:04:31,740
the 10th anniversary of doing mystery

1576
01:04:28,409 --> 01:04:33,598
investigators Wow I get we must have we

1577
01:04:31,739 --> 01:04:35,159
must have given our demonstration talk

1578
01:04:33,599 --> 01:04:38,670
now to hundreds and hundreds and

1579
01:04:35,159 --> 01:04:40,980
hundreds of children both here and we've

1580
01:04:38,670 --> 01:04:42,659
done that in New Zealand and in the

1581
01:04:40,980 --> 01:04:45,570
United States a couple of shows there

1582
01:04:42,659 --> 01:04:48,598

wow I can't believe it's been 10 years

1583

01:04:45,570 --> 01:04:51,480

that's the mystery investigators a show

1584

01:04:48,599 --> 01:04:54,119

we really love doing but for this week

1585

01:04:51,480 --> 01:05:00,329

this is Richard Saunders signing off

1586

01:04:54,119 --> 01:05:03,630

from Sydney Australia you've been

1587

01:05:00,329 --> 01:05:08,130

listening to the skeptic zone visit our

1588

01:05:03,630 --> 01:05:10,619

website at www.skeptics.org on TV for

1589

01:05:08,130 --> 01:05:13,250

comments contacts and extra video

1590

01:05:10,619 --> 01:05:13,250

reports

1591

01:05:16,349 --> 01:05:18,410

you