

The Skeptic Zone

Show 237 - 4 May 2013



Dr Colin Wright

1
00:00:22,430 --> 00:00:09,080
welcome to the skeptic zone the podcast

2
00:00:29,520 --> 00:00:25,260
hello and welcome to the skeptic zone

3
00:00:32,790 --> 00:00:29,530
episode number 237 for the fourth of may

4
00:00:35,970 --> 00:00:32,800
2013 Richard Saunders here with you from

5
00:00:38,700 --> 00:00:35,980
Sydney Australia now before we get into

6
00:00:40,200 --> 00:00:38,710
what's coming up on this week's show in

7
00:00:44,970 --> 00:00:40,210
the past week it came to my attention

8
00:00:49,380 --> 00:00:44,980
that something i said are on a skeptical

9
00:00:52,860 --> 00:00:49,390
activism panel in manchester the QED con

10
00:00:55,200 --> 00:00:52,870
may have been taken the wrong way maybe

11
00:00:59,400 --> 00:00:55,210
in fact i think it was in certain

12
00:01:01,880 --> 00:00:59,410
quarters anyway i issued this statement

13
00:01:05,760 --> 00:01:01,890

a couple of days ago on facebook and

14

00:01:08,160 --> 00:01:05,770

well i'll repeat it here during a panel

15

00:01:10,440 --> 00:01:08,170

at the recent QED con in Manchester I

16

00:01:12,570 --> 00:01:10,450

made comments that seem to have caused

17

00:01:15,240 --> 00:01:12,580

some concern when trying to emphasize

18

00:01:16,950 --> 00:01:15,250

the importance of being careful and

19

00:01:19,770 --> 00:01:16,960

doing your homework when being an active

20

00:01:21,990 --> 00:01:19,780

skeptic it is possible I was clumsy with

21

00:01:24,180 --> 00:01:22,000

my words having just come off the main

22

00:01:27,300 --> 00:01:24,190

stage maybe my thoughts weren't as sharp

23

00:01:29,660 --> 00:01:27,310

as they should have been if anyone got

24

00:01:33,150 --> 00:01:29,670

the impression that I was discouraging

25

00:01:34,830 --> 00:01:33,160

grass-roots skeptical activism or that

26

00:01:37,530 --> 00:01:34,840

this work should be left to those with

27

00:01:40,170 --> 00:01:37,540

more expertise than I do apologize

28

00:01:42,750 --> 00:01:40,180

indeed Michael Marshall pick me up on my

29

00:01:45,690 --> 00:01:42,760

comment to clarify what I had just said

30

00:01:49,080 --> 00:01:45,700

and I immediately agreed with him to be

31

00:01:51,660 --> 00:01:49,090

clear we need grassroots activism and I

32

00:01:54,900 --> 00:01:51,670

encourage it many of the promos on the

33

00:01:58,410 --> 00:01:54,910

skeptic zone are indeed for grass roots

34

00:02:01,350 --> 00:01:58,420

skeptics my main message albeit not as

35

00:02:04,050 --> 00:02:01,360

clear as it should have been was to take

36

00:02:07,890 --> 00:02:04,060

care well there you go i hope that

37

00:02:09,479 --> 00:02:07,900

clears up any confusion or people

38

00:02:11,910 --> 00:02:09,489

weren't exactly sure what i was getting

39

00:02:14,369 --> 00:02:11,920

out at the time i hope that makes that

40

00:02:17,550 --> 00:02:14,379

clear but coming up on this week's show

41

00:02:22,619 --> 00:02:17,560

it's back to Manchester back to QED con

42

00:02:24,270 --> 00:02:22,629

when I chat to dr. Colin right dr. Colin

43

00:02:28,709 --> 00:02:24,280

right is involved with something called

44

00:02:31,410 --> 00:02:28,719

maths Jam he's a mathematician he's a

45

00:02:33,750 --> 00:02:31,420

juggler and he does

46

00:02:35,490 --> 00:02:33,760

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

47

00:02:38,040 --> 00:02:35,500

me of the doctor you know in Doctor Who

48

00:02:39,600 --> 00:02:38,050

so he carries this little case around

49

00:02:41,339 --> 00:02:39,610

with him in he opens it up and out pops

50

00:02:45,180 --> 00:02:41,349

all sorts of surprises and tricks and

51
00:02:47,370 --> 00:02:45,190
puzzles and problems and illusions it's

52
00:02:48,809 --> 00:02:47,380
it's it's quite something anyway I'm

53
00:02:50,880 --> 00:02:48,819
going to have a chat with dr. Colin

54
00:02:53,550 --> 00:02:50,890
right coming up at the top of the show

55
00:02:54,960 --> 00:02:53,560
and after that it's a week in science

56
00:02:57,120 --> 00:02:54,970
with our good friend dr. Paul with us

57
00:03:01,860 --> 00:02:57,130
from the Royal Institution of Australia

58
00:03:05,430 --> 00:03:01,870
at RI aus org a you it seems like every

59
00:03:08,850 --> 00:03:05,440
week is another big week in science well

60
00:03:11,400 --> 00:03:08,860
that's true following that dr. Rachel

61
00:03:13,729 --> 00:03:11,410
reports a very different dr. HC a very

62
00:03:16,770 --> 00:03:13,739
different doctor AG doctor 'he was on

63
00:03:21,270 --> 00:03:16,780

ABC radio in melbourne in the past week

64

00:03:23,640 --> 00:03:21,280
on 774 with Richard Stubbs so dr. Rachel

65

00:03:26,120 --> 00:03:23,650
reports this week is her appearance on

66

00:03:29,509 --> 00:03:26,130
Melbourne radio talking about

67

00:03:31,890 --> 00:03:29,519
vaccination issues and she even takes

68

00:03:34,320 --> 00:03:31,900
Colin talk back that's very interesting

69

00:03:37,050 --> 00:03:34,330
good on your doctor AG good on you for

70

00:03:40,319 --> 00:03:37,060
getting out there in on the the

71

00:03:44,370 --> 00:03:40,329
mainstream media and we thank very much

72

00:03:47,220 --> 00:03:44,380
thank 774 ABC radio for this audio and

73

00:03:49,289 --> 00:03:47,230
to round off the show Maynard spooky

74

00:03:51,449 --> 00:03:49,299
action you can't keep him away you can't

75

00:03:53,280 --> 00:03:51,459
keep a good man down may not heads back

76
00:03:55,620 --> 00:03:53,290
to Sydney skeptics in the pub and ask

77
00:03:59,750 --> 00:03:55,630
the big question the big question this

78
00:04:04,949 --> 00:03:59,760
week should skeptics still investigate

79
00:04:08,130 --> 00:04:04,959
UFOs hmm find out what Sydney skeptic

80
00:04:10,170 --> 00:04:08,140
and the pub people think later in the

81
00:04:11,580 --> 00:04:10,180
show now thank you to all the people

82
00:04:14,250 --> 00:04:11,590
have been writing in saying how much

83
00:04:24,240 --> 00:04:14,260
they enjoyed our little space adventure

84
00:04:33,120 --> 00:04:28,140
all stop captain right chief Chen I need

85
00:04:34,950 --> 00:04:33,130
dirt five now can we do it captain that

86
00:04:37,050 --> 00:04:34,960
emergency stop burnt out the antimatter

87
00:04:39,750 --> 00:04:37,060
exchange the relay couplings the

88
00:04:43,470 --> 00:04:39,760

microwave super heater and my hair dryer

89

00:04:53,280 --> 00:04:43,480

chief we need dirt five hair dryer or

90

00:04:55,680 --> 00:04:53,290

not hi captain chat out if you haven't

91

00:04:59,520 --> 00:04:55,690

heard of these is at wwc a petting zoo

92

00:05:02,130 --> 00:04:59,530

TV scroll down a little bit and you can

93

00:05:03,659 --> 00:05:02,140

see the link for solar flare a lot of

94

00:05:06,240 --> 00:05:03,669

work went into that and we had an

95

00:05:08,460 --> 00:05:06,250

enormous amount of fun putting that all

96

00:05:09,810 --> 00:05:08,470

together it did take a long time longer

97

00:05:11,700 --> 00:05:09,820

than I would have thought that when you

98

00:05:13,440 --> 00:05:11,710

listen to it I think you'll understand

99

00:05:16,350 --> 00:05:13,450

why the production that went into it was

100

00:05:18,120 --> 00:05:16,360

it was quite something but yeah lots of

101
00:05:20,190 --> 00:05:18,130
good comments coming back lots of emails

102
00:05:22,470 --> 00:05:20,200
i've been getting here people telling me

103
00:05:25,110 --> 00:05:22,480
there laughs laughter certain parts of

104
00:05:27,810 --> 00:05:25,120
their Anatomy off listening to it that's

105
00:05:29,370 --> 00:05:27,820
all very encouraging and if you liked

106
00:05:32,790 --> 00:05:29,380
solar flare if you thought it was great

107
00:05:35,010 --> 00:05:32,800
fun please spread the word please blog

108
00:05:37,080 --> 00:05:35,020
it Twitter right to your friends in your

109
00:05:39,650 --> 00:05:37,090
enemies and tell them to give solar

110
00:05:42,030 --> 00:05:39,660
flare I listened maybe they'll enjoy it

111
00:05:44,750 --> 00:05:42,040
now our friends down in Canberra the

112
00:05:47,460 --> 00:05:44,760
acct the Australian Capital Territory

113
00:05:50,219 --> 00:05:47,470

our nation's capital have been very busy

114

00:05:51,960 --> 00:05:50,229

as always and they've been very kind

115

00:05:54,650 --> 00:05:51,970

they've invited me to come and give a

116

00:05:59,400 --> 00:05:54,660

talk so I'll be appearing in Canberra on

117

00:06:02,630 --> 00:05:59,410

jun the first june the first from 1 30

118

00:06:05,190 --> 00:06:02,640

to three o'clock at the lecture theatre

119

00:06:07,500 --> 00:06:05,200

CSIRO discovery center which is in

120

00:06:10,650 --> 00:06:07,510

clooney's ross street acton in the acct

121

00:06:14,310 --> 00:06:10,660

and i'll be giving my talk adventures of

122

00:06:17,310 --> 00:06:14,320

a paranormal investigator or don't come

123

00:06:19,110 --> 00:06:17,320

the raw prawn with me ghost spoon

124

00:06:21,600 --> 00:06:19,120

bending mind tricks talking with the

125

00:06:23,370 --> 00:06:21,610

dead water divining and anti-vaccination

126
00:06:26,280 --> 00:06:23,380
movement all come under the microscope

127
00:06:28,800 --> 00:06:26,290
in this talk and demonstration so that's

128
00:06:33,390 --> 00:06:28,810
the first of june are for more

129
00:06:36,000 --> 00:06:33,400
information visit [www.pay xorg a](http://www.payxorg.a) you

130
00:06:37,730 --> 00:06:36,010
this is the torque I've been doing

131
00:06:40,309 --> 00:06:37,740
around the world lately

132
00:06:42,200 --> 00:06:40,319
including places like Oslo and Ireland

133
00:06:45,770 --> 00:06:42,210
was it entirely appropriate because

134
00:06:49,939 --> 00:06:45,780
after the after the talk will be heading

135
00:06:52,460 --> 00:06:49,949
for King o'malley's irish pub i hope to

136
00:06:55,400 --> 00:06:52,470
see you there well that's enough from me

137
00:06:59,540 --> 00:06:55,410
for this introduction it's time for me

138
00:07:03,370 --> 00:06:59,550

to run downstairs and have some let me

139

00:07:06,620 --> 00:07:03,380

see can you guess but you can't

140

00:07:30,260 --> 00:07:06,630

spaghetti on toast well I do that I hope

141

00:07:32,330 --> 00:07:30,270

you enjoy the skeptic zone dr. Colin

142

00:07:35,960 --> 00:07:32,340

right what is what is this math Jam

143

00:07:38,089 --> 00:07:35,970

maths kamath jam yeah bit of a tongue

144

00:07:40,730 --> 00:07:38,099

twister tell us all about it the basic

145

00:07:43,070 --> 00:07:40,740

idea of maths Jam is that a guy called

146

00:07:44,959 --> 00:07:43,080

matt parker had some friends he actually

147

00:07:47,120 --> 00:07:44,969

has friends and they were gathered

148

00:07:48,770 --> 00:07:47,130

together in a pub one evening in london

149

00:07:51,200 --> 00:07:48,780

and somebody showed a new gimmick that

150

00:07:53,659 --> 00:07:51,210

they had a new toy that they had and

151
00:07:55,730 --> 00:07:53,669
they were all science-based people so

152
00:07:57,499 --> 00:07:55,740
they started to play with that and then

153
00:07:59,920 --> 00:07:57,509
somebody else had another had a puzzle

154
00:08:03,140 --> 00:07:59,930
that they showed and so they started

155
00:08:06,200 --> 00:08:03,150
talking about puzzles and games and

156
00:08:07,640 --> 00:08:06,210
maths and those sorts of toys and they

157
00:08:09,529 --> 00:08:07,650
said yeah we should do this more often

158
00:08:12,050 --> 00:08:09,539
we don't get a chance to just kind of

159
00:08:14,029 --> 00:08:12,060
geek out together and swap these sorts

160
00:08:16,249 --> 00:08:14,039
of games and puzzles and so on so said

161
00:08:19,279 --> 00:08:16,259
well yeah let's meet up again and so it

162
00:08:21,499 --> 00:08:19,289
started that the second last Tuesday of

163
00:08:23,390 --> 00:08:21,509

every month they get a group of people

164

00:08:27,050 --> 00:08:23,400

and they would just go to a pub and

165

00:08:29,570 --> 00:08:27,060

commandeer a table and and start to do

166

00:08:31,339 --> 00:08:29,580

maths with each other and burnt puzzles

167

00:08:32,870 --> 00:08:31,349

and games and toys not specifically

168

00:08:35,600 --> 00:08:32,880

calculations in fact pretty much

169

00:08:38,600 --> 00:08:35,610

specifically not calculations and was in

170

00:08:41,630 --> 00:08:38,610

a pub so it was adults sharing amongst

171

00:08:43,339 --> 00:08:41,640

themselves as as as is equals almost

172

00:08:45,050 --> 00:08:43,349

although you've caused some of them work

173

00:08:46,610 --> 00:08:45,060

more mathematically able and some were

174

00:08:48,199 --> 00:08:46,620

less mathematically able but that didn't

175

00:08:50,450 --> 00:08:48,209

matter because they were sharing fun

176

00:08:53,060 --> 00:08:50,460

games toys puzzles and so on

177

00:08:54,380 --> 00:08:53,070

and then I I went to a big conference in

178

00:08:56,600 --> 00:08:54,390

America and came back to another

179

00:08:59,360 --> 00:08:56,610

conference here and and one of my

180

00:09:03,170 --> 00:08:59,370

friends said yet there's this there's no

181

00:09:05,780 --> 00:09:03,180

place for adults to chat about maths

182

00:09:08,450 --> 00:09:05,790

there are so many that there are serious

183

00:09:10,910 --> 00:09:08,460

conferences about education and maths

184

00:09:14,180 --> 00:09:10,920

education but there's no idiots to get

185

00:09:16,670 --> 00:09:14,190

together and play and so I went and

186

00:09:19,550 --> 00:09:16,680

talked to Matt and James grime who goes

187

00:09:21,320 --> 00:09:19,560

out here's another math guy who goes out

188

00:09:23,150 --> 00:09:21,330

and talks to two school kids and adults

189

00:09:25,160 --> 00:09:23,160

and so forth and we got together he said

190

00:09:28,130 --> 00:09:25,170

well how can we do this and so we got

191

00:09:30,170 --> 00:09:28,140

together to run a weekend of exactly

192

00:09:32,330 --> 00:09:30,180

this kind of thing it's not attached to

193

00:09:34,760 --> 00:09:32,340

education it's not attached to

194

00:09:37,880 --> 00:09:34,770

continuing professional development it's

195

00:09:42,140 --> 00:09:37,890

not worthy it's just let's get together

196

00:09:43,940 --> 00:09:42,150

and have fun as a side effect there's a

197

00:09:45,620 --> 00:09:43,950

bunch of stuff that people take back to

198

00:09:48,890 --> 00:09:45,630

their schools to get kids interested

199

00:09:50,870 --> 00:09:48,900

puzzles toys games and so forth but we

200

00:09:53,180 --> 00:09:50,880

have a wide range of people we have an

201
00:09:55,280 --> 00:09:53,190
Egyptologist who comes and talks about

202
00:09:56,720 --> 00:09:55,290
the maths in ancient Egypt we have a

203
00:09:59,000 --> 00:09:56,730
linguist who comes and talks about

204
00:10:01,970 --> 00:09:59,010
patterns in language a musicologist who

205
00:10:03,620 --> 00:10:01,980
comes we have retired math lecturers we

206
00:10:05,870 --> 00:10:03,630
do have students come along because this

207
00:10:07,640 --> 00:10:05,880
is not in a pub so we can have some

208
00:10:10,700 --> 00:10:07,650
younger kids come along but it's for

209
00:10:13,280 --> 00:10:10,710
adults to play with the mathematical

210
00:10:16,670 --> 00:10:13,290
ideas it's not to be attached to

211
00:10:20,300 --> 00:10:16,680
education or to train people and all the

212
00:10:23,960 --> 00:10:20,310
talks are five minutes five minutes five

213
00:10:25,160 --> 00:10:23,970

minutes which it makes them the person

214

00:10:26,690 --> 00:10:25,170

giving the talk really think about what

215

00:10:28,580 --> 00:10:26,700

they're going to say right oh yeah and

216

00:10:30,830 --> 00:10:28,590

the other thing is you can't try and

217

00:10:32,570 --> 00:10:30,840

teach people things in five minutes all

218

00:10:34,820 --> 00:10:32,580

you can do is show them something that

219

00:10:36,320 --> 00:10:34,830

you think is interesting and you think

220

00:10:38,390 --> 00:10:36,330

that they will find interesting so you

221

00:10:41,030 --> 00:10:38,400

are sharing something that you find

222

00:10:43,280 --> 00:10:41,040

interesting and we've got sort of 100 to

223

00:10:45,590 --> 00:10:43,290

150 people come along to these weekends

224

00:10:47,630 --> 00:10:45,600

and amongst them they will sup be some

225

00:10:49,520 --> 00:10:47,640

who just don't care about what you just

226
00:10:51,890 --> 00:10:49,530
showed them but there will be others who

227
00:10:53,450 --> 00:10:51,900
think that is really cool and then come

228
00:10:56,570 --> 00:10:53,460
and talk to you and that's the other big

229
00:10:59,660 --> 00:10:56,580
thing is only sixty percent of the time

230
00:11:01,940 --> 00:10:59,670
is actually spent in sessions in talks

231
00:11:03,440 --> 00:11:01,950
so we have an hour of talks we fit fit

232
00:11:06,110 --> 00:11:03,450
eight or nine talks in an hour

233
00:11:07,700 --> 00:11:06,120
and then we have 30 minutes as a break

234
00:11:10,280 --> 00:11:07,710
for people to play with toys that are on

235
00:11:12,230 --> 00:11:10,290
the tables or to talk to the speakers

236
00:11:14,150 --> 00:11:12,240
from the previous session and then we go

237
00:11:16,010 --> 00:11:14,160
back for another eight or nine Talt in

238
00:11:18,650 --> 00:11:16,020

an hour and then we have another half an

239

00:11:20,540 --> 00:11:18,660

hour breaks is plenty of time for people

240

00:11:22,520 --> 00:11:20,550

to play with the toys that are there

241

00:11:24,230 --> 00:11:22,530

play games against each other try and

242

00:11:25,640 --> 00:11:24,240

construct the models that they've got or

243

00:11:28,280 --> 00:11:25,650

talk to the speakers about what they're

244

00:11:30,080 --> 00:11:28,290

interested in now if our listeners care

245

00:11:35,210 --> 00:11:30,090

to find out more about this where is the

246

00:11:37,360 --> 00:11:35,220

URL what work may visit www.fcn.com it's

247

00:11:39,920 --> 00:11:37,370

pretty easy to remember and you have a

248

00:11:43,370 --> 00:11:39,930

conundrum for our listeners may be a

249

00:11:45,820 --> 00:11:43,380

really cool one if you take a square yes

250

00:11:49,250 --> 00:11:45,830

it's really easy to cut it into pieces

251
00:11:54,320 --> 00:11:49,260
identical pieces where all of them touch

252
00:11:57,500 --> 00:11:54,330
the center right first question in how

253
00:12:00,260 --> 00:11:57,510
many ways can you do this that's a tough

254
00:12:03,130 --> 00:12:00,270
one but the second question is if you

255
00:12:05,600 --> 00:12:03,140
cut a circle in two identical pieces

256
00:12:07,340 --> 00:12:05,610
it's hard to think of any way of doing

257
00:12:09,110 --> 00:12:07,350
it where they don't all touch the center

258
00:12:11,780 --> 00:12:09,120
I mean you just slice it up like a pizza

259
00:12:14,240 --> 00:12:11,790
yeah so the challenge is cut a circle in

260
00:12:17,330 --> 00:12:14,250
two identical pieces that do not all

261
00:12:18,830 --> 00:12:17,340
touch the center point we have a little

262
00:12:22,220 --> 00:12:18,840
audience listening to our interview

263
00:12:27,030 --> 00:12:24,780

that's a good one oh I listeners there's

264

00:12:43,610 --> 00:12:27,040

a little conundrum for you and visit the

265

00:12:49,980 --> 00:12:47,610

greetings skeptics erm listeners do you

266

00:12:52,590 --> 00:12:49,990

know what to do in August come to

267

00:12:56,190 --> 00:12:52,600

Stockholm Sweden and meet astronaut

268

00:13:00,320 --> 00:12:56,200

killer tofu lasagna activist hey Lee

269

00:13:03,390 --> 00:13:00,330

Stevens / guru upon snow sleen

270

00:13:06,870 --> 00:13:03,400

undercover health journalist an abyssea

271

00:13:09,870 --> 00:13:06,880

and many more at the 15th European

272

00:13:12,570 --> 00:13:09,880

skeptics Congress friday the

273

00:13:16,170 --> 00:13:12,580

twenty-third to sunday the 25th of

274

00:13:20,130 --> 00:13:16,180

august in stockholm sweden but a 15th

275

00:13:25,550 --> 00:13:20,140

european skeptics conference www dr.

276

00:13:37,530 --> 00:13:25,560

Euroskeptic Scarlett I'm talking www

277

00:13:43,480 --> 00:13:40,330

welcome to a week in science from our

278

00:13:45,720 --> 00:13:43,490

aisles this week a new bird flu the

279

00:13:55,150 --> 00:13:45,730

evolution of taller thinner women and

280

00:13:56,769 --> 00:13:55,160

tiny flying robots Chinese scientists

281

00:13:59,740 --> 00:13:56,779

have confirmed that a new influenza

282

00:14:02,980 --> 00:13:59,750

virus has been transmitted from birds to

283

00:14:06,730 --> 00:14:02,990

humans 108 people our thoughts have been

284

00:14:09,280 --> 00:14:06,740

infected with the h7n9 virus since it

285

00:14:11,860 --> 00:14:09,290

first emerged in February this year with

286

00:14:13,480 --> 00:14:11,870

a suspected death toll of 22 people

287

00:14:16,090 --> 00:14:13,490

appear to have picked up the virus from

288

00:14:17,650 --> 00:14:16,100

chickens in meat markets in a separate

289

00:14:20,710 --> 00:14:17,660

study scientists have identified a

290

00:14:24,430 --> 00:14:20,720

possible way that the h5n1 form of bird

291

00:14:28,930 --> 00:14:24,440

flu which first emerged in 2003 infects

292

00:14:31,120 --> 00:14:28,940

humans Australian researchers may have

293

00:14:33,300 --> 00:14:31,130

found a cheap and easy way to detect

294

00:14:36,010 --> 00:14:33,310

early cases of Alzheimer's disease

295

00:14:38,290 --> 00:14:36,020

symptoms of Alzheimer's only show up

296

00:14:40,510 --> 00:14:38,300

after significant damages occurred to

297

00:14:43,570 --> 00:14:40,520

the brain and currently early detection

298

00:14:45,610 --> 00:14:43,580

tests are invasive and expensive the

299

00:14:47,530 --> 00:14:45,620

research found compounds in the blood

300

00:14:49,870 --> 00:14:47,540

that differed between people with high

301
00:14:53,440 --> 00:14:49,880
and low risks of developing the disease

302
00:14:55,240 --> 00:14:53,450
this new blood signature could allow

303
00:14:57,070 --> 00:14:55,250
widespread screening and early

304
00:15:02,650 --> 00:14:57,080
interventions that may slow the

305
00:15:05,740 --> 00:15:02,660
progression of Alzheimer's girls who

306
00:15:07,870 --> 00:15:05,750
receive two doses of the HPV vaccine had

307
00:15:10,270 --> 00:15:07,880
the same protection as those who had the

308
00:15:12,670 --> 00:15:10,280
recommended three doses in an effort to

309
00:15:14,770 --> 00:15:12,680
protect bees the European Union has

310
00:15:17,530 --> 00:15:14,780
announced severe restrictions on the use

311
00:15:19,930 --> 00:15:17,540
of three pesticides cicadas clean

312
00:15:22,660 --> 00:15:19,940
themselves by making dewdrops jump from

313
00:15:24,910 --> 00:15:22,670

their wings and living longer and having

314

00:15:27,790 --> 00:15:24,920

fewer children maybe making women taller

315

00:15:30,490 --> 00:15:27,800

and thinner scientists at Harvard

316

00:15:33,250 --> 00:15:30,500

University have built a flying robot

317

00:15:35,410 --> 00:15:33,260

that is no bigger than a house fly they

318

00:15:37,329 --> 00:15:35,420

used cutting edge materials to build

319

00:15:40,240 --> 00:15:37,339

micro structures within the wing

320

00:15:42,640 --> 00:15:40,250

allowing it to flap when electrified the

321

00:15:44,170 --> 00:15:42,650

tiny robot offers a new way to study the

322

00:15:46,269 --> 00:15:44,180

flight mechanics of flapping

323

00:15:51,840 --> 00:15:46,279

wings as well as helping miniaturized

324

00:15:57,820 --> 00:15:55,900

if you love a week in science and why

325

00:15:59,829 --> 00:15:57,830

wouldn't you why not share it with your

326

00:16:01,540 --> 00:15:59,839

friends we're growing a healthy

327

00:16:06,519 --> 00:16:01,550

following and you can help spread the

328

00:16:10,120 --> 00:16:06,529

word send your friends to RI aus org a

329

00:16:12,820 --> 00:16:10,130

you / week in sai for video and podcasts

330

00:16:14,860 --> 00:16:12,830

versions plus more information on the

331

00:16:17,019 --> 00:16:14,870

stories that's been the highlights of

332

00:16:19,269 --> 00:16:17,029

another big week in science for more

333

00:16:23,410 --> 00:16:19,279

information and other science news check

334

00:16:26,079 --> 00:16:23,420

out the are isles website RI aus dot org

335

00:16:28,840 --> 00:16:26,089

dot a you where you can also sign up for

336

00:16:31,510 --> 00:16:28,850

notifications of future episodes you can

337

00:16:35,260 --> 00:16:31,520

also follow a week in science on twitter

338

00:16:37,329 --> 00:16:35,270

using the hashtag week inside i'm poor

339

00:16:48,220 --> 00:16:37,339

willis and on behalf of the our oils

340

00:16:50,199 --> 00:16:48,230

team i'll see you next week this is

341

00:16:53,079 --> 00:16:50,209

desiree host of Canadian radio shows

342

00:16:55,240 --> 00:16:53,089

skeptically speaking for those of you

343

00:16:57,820 --> 00:16:55,250

that don't know Kenneth is quite similar

344

00:17:00,910 --> 00:16:57,830

to Australia people know is primarily

345

00:17:04,480 --> 00:17:00,920

for our weather and our beer and we have

346

00:17:07,390 --> 00:17:04,490

a queen just like you do same one as you

347

00:17:09,309 --> 00:17:07,400

do actually we also have mythical

348

00:17:11,710 --> 00:17:09,319

monsters and people who think they have

349

00:17:14,039 --> 00:17:11,720

psychic abilities and people who think

350

00:17:16,049 --> 00:17:14,049

that vaccinations are bad for you

351

00:17:22,669 --> 00:17:16,059

so keep listening to the skeptic zone

352

00:17:30,899 --> 00:17:26,069

now it's time for dr. Richie reports

353

00:17:33,269 --> 00:17:30,909

with dr. Rachel Dunlop we're going to

354

00:17:35,789 --> 00:17:33,279

look at immunization next and although

355

00:17:39,509 --> 00:17:35,799

the evidence against immunization has

356

00:17:41,609 --> 00:17:39,519

been completely debunked still people

357

00:17:44,820 --> 00:17:41,619

cling to the idea that immunization is

358

00:17:48,029 --> 00:17:44,830

somehow bad or dangerous or you

359

00:17:51,659 --> 00:17:48,039

shouldn't be careful look out are they

360

00:17:53,729 --> 00:17:51,669

risk involved in immunization sure what

361

00:17:55,080 --> 00:17:53,739

likelihood of risk are they what level

362

00:17:57,899 --> 00:17:55,090

of risk are there and what a genuine

363

00:18:01,259 --> 00:17:57,909

risks as opposed to rumors and the

364

00:18:02,639 --> 00:18:01,269

hangovers have discounted evidence we're

365

00:18:04,229 --> 00:18:02,649

going to talk about that next it's very

366

00:18:06,239 --> 00:18:04,239

difficult to shake an opinion once

367

00:18:08,489 --> 00:18:06,249

you've formed it particularly if you've

368

00:18:12,539 --> 00:18:08,499

been vocal in that opinion if you've

369

00:18:14,970 --> 00:18:12,549

stood there and I get a case and then

370

00:18:17,009 --> 00:18:14,980

find out that the case you argued had no

371

00:18:20,999 --> 00:18:17,019

basis in fact it's often difficult to

372

00:18:24,539 --> 00:18:21,009

retract and call again as they lay out

373

00:18:27,450 --> 00:18:24,549

of line with that I guess it's part of

374

00:18:30,029 --> 00:18:27,460

why an anti immunization debate still

375

00:18:33,029 --> 00:18:30,039

exists that there's some undercurrent of

376

00:18:35,759 --> 00:18:33,039

uncertainty there's some ah but didn't I

377

00:18:38,099 --> 00:18:35,769

hear something interestingly the rates

378

00:18:40,200 --> 00:18:38,109

of immunization in Australia have fallen

379

00:18:42,509 --> 00:18:40,210

in some areas some areas of Australia

380

00:18:45,869 --> 00:18:42,519

there are people gain I choose not to

381

00:18:47,849 --> 00:18:45,879

immunize my children I wonder why rachel

382

00:18:49,529 --> 00:18:47,859

Dunlop is a postdoctoral fellow at the

383

00:18:51,090 --> 00:18:49,539

University of Technology in Sydney she

384

00:18:53,999 --> 00:18:51,100

recently wrote an article on the

385

00:18:55,649 --> 00:18:54,009

conversation about this hi Rachel hi

386

00:18:57,570 --> 00:18:55,659

Richard thanks for having me you're also

387

00:19:01,499 --> 00:18:57,580

vice president of Australian skeptics

388

00:19:03,409 --> 00:19:01,509

yes I am um what what prompted you to

389

00:19:05,249 --> 00:19:03,419

write the article in the first place

390

00:19:07,019 --> 00:19:05,259

well I've been studying the

391

00:19:08,789 --> 00:19:07,029

anti-vaccination movement in Australia

392

00:19:11,159 --> 00:19:08,799

for about three or four years now and

393

00:19:13,379 --> 00:19:11,169

the more you read the stuff that they

394

00:19:15,210 --> 00:19:13,389

write the more you see the same sort of

395

00:19:17,279 --> 00:19:15,220

things come up again and again and again

396

00:19:19,710 --> 00:19:17,289

and I guess some of them are what you

397

00:19:21,330 --> 00:19:19,720

call them unsinkable rubber ducks in a

398

00:19:23,190 --> 00:19:21,340

sense it doesn't matter how many times

399

00:19:24,989 --> 00:19:23,200

you refute them or you explain them to

400

00:19:27,630 --> 00:19:24,999

people they still seem to stick around

401
00:19:29,880 --> 00:19:27,640
and these things are quite

402
00:19:32,400 --> 00:19:29,890
nash's and they can influence parents

403
00:19:34,920 --> 00:19:32,410
decisions to vaccinate particularly

404
00:19:37,080 --> 00:19:34,930
through their friends or you know their

405
00:19:38,490 --> 00:19:37,090
network of people around child care and

406
00:19:40,320 --> 00:19:38,500
that sort of thing so it's important I

407
00:19:42,510 --> 00:19:40,330
think to address them so that parents

408
00:19:45,320 --> 00:19:42,520
have a cheat sheet in a way which they

409
00:19:47,160 --> 00:19:45,330
can refer to and get some you know

410
00:19:48,570 --> 00:19:47,170
confidence that these things are

411
00:19:50,550 --> 00:19:48,580
actually myths they're not true then

412
00:19:53,010 --> 00:19:50,560
there's no evidence in in what these

413
00:19:54,960 --> 00:19:53,020

people are saying part of what grinds my

414

00:19:56,070 --> 00:19:54,970

gears about this argument is that people

415

00:19:58,410 --> 00:19:56,080

are willing to make decisions about

416

00:20:02,340 --> 00:19:58,420

their kids not getting immunized based

417

00:20:05,670 --> 00:20:02,350

on a conversation you know some friends

418

00:20:07,260 --> 00:20:05,680

said but if they they they won't

419

00:20:10,380 --> 00:20:07,270

research the facts and be if they do

420

00:20:11,760 --> 00:20:10,390

that they look with suspicion on Western

421

00:20:14,940 --> 00:20:11,770

medicine I'm doing that thing with my

422

00:20:18,020 --> 00:20:14,950

fingers and scientific findings yeah so

423

00:20:21,570 --> 00:20:18,030

so that rumor and innuendo from a

424

00:20:24,330 --> 00:20:21,580

unscientific no knowledge base person is

425

00:20:25,920 --> 00:20:24,340

somehow given more weight than I yeah

426

00:20:28,620 --> 00:20:25,930

well this is what several years of

427

00:20:30,990 --> 00:20:28,630

research and science shows us why is

428

00:20:33,180 --> 00:20:31,000

there it's curious isn't it and I think

429

00:20:36,390 --> 00:20:33,190

it's partly because anecdotes are very

430

00:20:37,950 --> 00:20:36,400

powerful things there's some psychology

431

00:20:40,110 --> 00:20:37,960

behind that I'm not a psychologist so I

432

00:20:42,600 --> 00:20:40,120

couldn't begin to explain it but the

433

00:20:44,460 --> 00:20:42,610

power of anecdote is very strong the

434

00:20:47,310 --> 00:20:44,470

thing about science is it can be pretty

435

00:20:49,470 --> 00:20:47,320

boring it can be pretty dry and people

436

00:20:51,060 --> 00:20:49,480

don't generally relate to it so I can

437

00:20:53,220 --> 00:20:51,070

you know sit here and put up graphs

438

00:20:55,860 --> 00:20:53,230

until the cows come home showing you the

439

00:20:58,170 --> 00:20:55,870

evidence that once we introduced the Hib

440

00:20:59,850 --> 00:20:58,180

vaccine in nineteen ninety four cases

441

00:21:02,040 --> 00:20:59,860

dropped ninety percent but that's not

442

00:21:03,810 --> 00:21:02,050

particularly a motive and when you have

443

00:21:06,480 --> 00:21:03,820

stories of children that have been

444

00:21:08,550 --> 00:21:06,490

injured by vaccines or their parents say

445

00:21:11,760 --> 00:21:08,560

that they have that stuff is incredibly

446

00:21:13,440 --> 00:21:11,770

emotive and there are some yes are you

447

00:21:15,180 --> 00:21:13,450

wearing your insignia no we're going to

448

00:21:16,830 --> 00:21:15,190

buy into each other a little bit so yeah

449

00:21:18,540 --> 00:21:16,840

we weren't worried about that there's

450

00:21:21,210 --> 00:21:18,550

also that other thing too that people

451
00:21:25,410 --> 00:21:21,220
gah pharmaceutical companies make money

452
00:21:26,610 --> 00:21:25,420
out of vaccines so always going to say

453
00:21:27,990 --> 00:21:26,620
you should have them and everyone not

454
00:21:29,700 --> 00:21:28,000
yeah that's are you there must be the

455
00:21:31,290 --> 00:21:29,710
reason I mean of course they make money

456
00:21:33,870 --> 00:21:31,300
that you know there are business but in

457
00:21:36,060 --> 00:21:33,880
fact it most of their profit does not

458
00:21:38,070 --> 00:21:36,070
come from making vaccinations and when

459
00:21:40,230 --> 00:21:38,080
you think about it logically wouldn't it

460
00:21:41,490 --> 00:21:40,240
be more beneficial for pharmaceutical

461
00:21:43,080 --> 00:21:41,500
companies if we all got the

462
00:21:45,660 --> 00:21:43,090
diseases because then we'd be sicker

463
00:21:47,430 --> 00:21:45,670

sticker for longer we probably have

464

00:21:49,710 --> 00:21:47,440

chronic side effects chronic long-term

465

00:21:52,050 --> 00:21:49,720

effects surely that would make them more

466

00:21:54,750 --> 00:21:52,060

money than preventive medicine which is

467

00:21:56,700 --> 00:21:54,760

essentially what vaccines are what

468

00:21:59,220 --> 00:21:56,710

you've studied this for so long what's

469

00:22:01,820 --> 00:21:59,230

the thinking behind people who don't

470

00:22:04,440 --> 00:22:01,830

have their child vaccinated in Australia

471

00:22:07,650 --> 00:22:04,450

particularly in terms of what happens if

472

00:22:10,020 --> 00:22:07,660

that child then goes overseas yeah this

473

00:22:11,850 --> 00:22:10,030

is a really tricky situation because I

474

00:22:13,310 --> 00:22:11,860

guess there's two camps in Australia

475

00:22:15,390 --> 00:22:13,320

there's what we know as the

476
00:22:17,240 --> 00:22:15,400
conscientious objectors and these are

477
00:22:19,650 --> 00:22:17,250
parents that have identified as

478
00:22:21,210 --> 00:22:19,660
objecting to vaccinations and they've

479
00:22:23,040 --> 00:22:21,220
actually signed a form to say they will

480
00:22:24,870 --> 00:22:23,050
not get their children vaccinated and

481
00:22:27,210 --> 00:22:24,880
then there's probably a large percentage

482
00:22:28,880 --> 00:22:27,220
and that that group is only about one

483
00:22:31,140 --> 00:22:28,890
point seven percent of the population

484
00:22:33,120 --> 00:22:31,150
but there's a group that we can't really

485
00:22:34,680 --> 00:22:33,130
quantitate or measure and that's called

486
00:22:37,770 --> 00:22:34,690
the fence sitters and their parents that

487
00:22:39,600 --> 00:22:37,780
are just confused and worried about the

488
00:22:41,790 --> 00:22:39,610

rumors that they hear and so they might

489

00:22:44,910 --> 00:22:41,800

either delay their kids vaccination or

490

00:22:46,260 --> 00:22:44,920

they might not get the full schedule of

491

00:22:48,570 --> 00:22:46,270

vaccination because of things that

492

00:22:50,430 --> 00:22:48,580

they've heard but as you say this does

493

00:22:53,700 --> 00:22:50,440

impact on children down the track and

494

00:22:55,860 --> 00:22:53,710

only two years ago in Brisbane a 22 year

495

00:22:57,570 --> 00:22:55,870

old girl died of diphtheria after a

496

00:22:59,820 --> 00:22:57,580

friend of hers brought it back from

497

00:23:01,410 --> 00:22:59,830

overseas and she probably didn't even

498

00:23:03,180 --> 00:23:01,420

realize she wasn't vaccinated for

499

00:23:06,720 --> 00:23:03,190

diphtheria and unfortunately she caught

500

00:23:08,340 --> 00:23:06,730

it and she died so in Australia now most

501
00:23:10,290 --> 00:23:08,350
of the diseases that we see here are

502
00:23:12,900 --> 00:23:10,300
imported and because we have a fairly

503
00:23:15,420 --> 00:23:12,910
high level of vaccination in general and

504
00:23:16,800 --> 00:23:15,430
in on average so mostly when you see

505
00:23:18,090 --> 00:23:16,810
those sort of things happen it's because

506
00:23:20,400 --> 00:23:18,100
they're brought in from overseas or

507
00:23:23,070 --> 00:23:20,410
people pick them up overseas John's

508
00:23:24,840 --> 00:23:23,080
called in from Q hi John yes look I

509
00:23:27,690 --> 00:23:24,850
bought it just to make a few points of

510
00:23:29,340 --> 00:23:27,700
the problem with vaccinations is that

511
00:23:31,440 --> 00:23:29,350
they're not based on the gold standard

512
00:23:34,470 --> 00:23:31,450
of scientific proof which is the control

513
00:23:36,930 --> 00:23:34,480

trial that compares vaccinated to an

514

00:23:39,570 --> 00:23:36,940

unvaccinated population and if that is

515

00:23:41,700 --> 00:23:39,580

done we know for sure whether vaccines

516

00:23:43,800 --> 00:23:41,710

to help to reduce the incidence of the

517

00:23:47,460 --> 00:23:43,810

infectious disease they're intended for

518

00:23:49,470 --> 00:23:47,470

and also that the vaccinated group is it

519

00:23:52,230 --> 00:23:49,480

does not suffer adverse effects which

520

00:23:52,940 --> 00:23:52,240

would outweigh the benefits now that is

521

00:23:54,980 --> 00:23:52,950

not been

522

00:23:57,650 --> 00:23:54,990

and that's the problem now if you look

523

00:23:59,780 --> 00:23:57,660

at the whooping cough vaccination that

524

00:24:03,110 --> 00:23:59,790

with the acellular vaccine this was

525

00:24:06,230 --> 00:24:03,120

found that the epidemic that came it was

526
00:24:07,790 --> 00:24:06,240
in Australia the vaccination offered no

527
00:24:11,420 --> 00:24:07,800
benefit in terms of reducing the

528
00:24:13,760 --> 00:24:11,430
incidence the vaccination rates were

529
00:24:16,040 --> 00:24:13,770
about ninety percent of the cases

530
00:24:18,410 --> 00:24:16,050
eighty-nine percent were vaccinated and

531
00:24:19,880 --> 00:24:18,420
Levin were unvaccinated which means that

532
00:24:22,700 --> 00:24:19,890
the vaccination made no difference at

533
00:24:24,770 --> 00:24:22,710
all there is no a data about this severe

534
00:24:27,110 --> 00:24:24,780
the intensity of the infection so we

535
00:24:30,050 --> 00:24:27,120
can't report on that but that was based

536
00:24:32,510 --> 00:24:30,060
on analysis of the statistics after the

537
00:24:34,250 --> 00:24:32,520
event first on do you think um do you

538
00:24:36,290 --> 00:24:34,260

think people should vaccinate their

539

00:24:38,150 --> 00:24:36,300

children I don't know because we don't

540

00:24:39,620 --> 00:24:38,160

have proof about safety or no no it's

541

00:24:41,360 --> 00:24:39,630

just an opinion what's your opinion I

542

00:24:43,130 --> 00:24:41,370

don't know because what you know that we

543

00:24:44,870 --> 00:24:43,140

do not have the proper data about safety

544

00:24:46,750 --> 00:24:44,880

even if he's there let me put in other

545

00:24:49,430 --> 00:24:46,760

ways they were benefit to the Society of

546

00:24:51,500 --> 00:24:49,440

everyone's vaccinated there may be there

547

00:24:53,810 --> 00:24:51,510

may not be we don't know so you now did

548

00:24:55,460 --> 00:24:53,820

I comment on that Richard I've just I

549

00:24:57,560 --> 00:24:55,470

wanted to get let John get all his

550

00:24:59,570 --> 00:24:57,570

points out and make his case what do you

551
00:25:00,950 --> 00:24:59,580
think he said that this that we can't

552
00:25:03,950 --> 00:25:00,960
compare this that we just don't know

553
00:25:05,060 --> 00:25:03,960
we've never compared a vaccinated

554
00:25:07,220 --> 00:25:05,070
population with a non-vaccinated

555
00:25:10,730 --> 00:25:07,230
population so we have no idea if it's

556
00:25:12,920 --> 00:25:10,740
effective well we have actually but the

557
00:25:15,110 --> 00:25:12,930
point that you raised initially about

558
00:25:17,120 --> 00:25:15,120
the randomized controlled trial or we

559
00:25:18,800 --> 00:25:17,130
can't do that ethically because a

560
00:25:20,840 --> 00:25:18,810
randomized control trial would involve

561
00:25:23,090 --> 00:25:20,850
taking two groups let's say of children

562
00:25:25,670 --> 00:25:23,100
putting them into two separate rooms

563
00:25:27,170 --> 00:25:25,680

vaccinating one group not vaccinating

564

00:25:29,660 --> 00:25:27,180

the other group and exposing them to a

565

00:25:31,790 --> 00:25:29,670

vaccine preventable disease now how does

566

00:25:33,710 --> 00:25:31,800

everyone think about doing that so it

567

00:25:35,300 --> 00:25:33,720

doesn't sound like a very good idea what

568

00:25:36,830 --> 00:25:35,310

that means John's right isn't he that he

569

00:25:38,450 --> 00:25:36,840

did we haven't got a gold down we

570

00:25:41,210 --> 00:25:38,460

haven't got that classic song no but I

571

00:25:44,090 --> 00:25:41,220

study so there no how can we be certain

572

00:25:46,940 --> 00:25:44,100

about because we have epidemiology we

573

00:25:49,400 --> 00:25:46,950

have a lot of evidence from history that

574

00:25:51,470 --> 00:25:49,410

shows us that vaccination reduces

575

00:25:53,840 --> 00:25:51,480

vaccine-preventable diseases now for

576

00:25:55,910 --> 00:25:53,850

example when we stopped vaccinating in

577

00:25:57,680 --> 00:25:55,920

particular areas we see a resurgence of

578

00:26:00,230 --> 00:25:57,690

vaccine-preventable diseases what happen

579

00:26:01,940 --> 00:26:00,240

in Wales yeah well this is the thing I

580

00:26:03,860 --> 00:26:01,950

mean it's a good point you raised John

581

00:26:05,540 --> 00:26:03,870

because at the moment because of low

582

00:26:06,590 --> 00:26:05,550

levels of vaccination for measles in

583

00:26:08,600 --> 00:26:06,600

Wales

584

00:26:10,730 --> 00:26:08,610

there's been an outbreak of measles

585

00:26:14,090 --> 00:26:10,740

there's now up to about a thousand cases

586

00:26:15,110 --> 00:26:14,100

and one death the man who died did have

587

00:26:16,880 --> 00:26:15,120

measles and we're waiting for

588

00:26:19,310 --> 00:26:16,890

confirmation as to whether that was the

589

00:26:21,200 --> 00:26:19,320

cause but we had levels dropped there

590

00:26:23,120 --> 00:26:21,210

because people were afraid of the MMR

591

00:26:24,529 --> 00:26:23,130

vaccine and so we as soon as levels

592

00:26:26,480 --> 00:26:24,539

dropped we got an increase in vaccine

593

00:26:29,990 --> 00:26:26,490

preventable diseases now the other thing

594

00:26:31,940 --> 00:26:30,000

is with smallpox now well we got rid of

595

00:26:35,480 --> 00:26:31,950

smallpox because we vaccinated until it

596

00:26:37,159 --> 00:26:35,490

was gone polio is almost gone we had two

597

00:26:39,950 --> 00:26:37,169

years free of polio and India just

598

00:26:41,659 --> 00:26:39,960

recently so we don't need to do what

599

00:26:43,640 --> 00:26:41,669

John says is the gold standard it's

600

00:26:45,200 --> 00:26:43,650

unethical to do it and we don't need it

601
00:26:48,409 --> 00:26:45,210
because we've got plenty of evidence for

602
00:26:50,360 --> 00:26:48,419
it John can't doesn't agreed can't form

603
00:26:51,710 --> 00:26:50,370
an opinion about immunization or not

604
00:26:53,779 --> 00:26:51,720
because he says there's not enough

605
00:26:56,060 --> 00:26:53,789
evidence as to whether it works or not

606
00:26:57,620 --> 00:26:56,070
would you disagree I would disagree i

607
00:26:59,899 --> 00:26:57,630
would suggest that he might be looking

608
00:27:02,060 --> 00:26:59,909
in the wrong places and he did seem to

609
00:27:03,590 --> 00:27:02,070
quote some stats there which I think

610
00:27:05,930 --> 00:27:03,600
he's cherry-picking slightly because

611
00:27:07,820 --> 00:27:05,940
he's talking about the age group that a

612
00:27:09,409 --> 00:27:07,830
young children were with the whooping

613
00:27:12,919 --> 00:27:09,419

cough vaccine which is covered under the

614

00:27:15,169 --> 00:27:12,929

dtap now if you look at the number of

615

00:27:17,570 --> 00:27:15,179

adults in Australia who are immune and

616

00:27:20,120 --> 00:27:17,580

still vaccinated against whooping cough

617

00:27:22,430 --> 00:27:20,130

there's only about eleven percent so in

618

00:27:24,110 --> 00:27:22,440

kids yes it's up to about 90 but in

619

00:27:25,940 --> 00:27:24,120

adults it's down to around eleven

620

00:27:27,470 --> 00:27:25,950

percent so it's likely that it's the

621

00:27:29,210 --> 00:27:27,480

adults who haven't had their boosters

622

00:27:31,279 --> 00:27:29,220

that are responsible for the resurgence

623

00:27:32,690 --> 00:27:31,289

of whooping cough but of course you know

624

00:27:34,430 --> 00:27:32,700

there's lots of side effects of vaccines

625

00:27:38,899 --> 00:27:34,440

we know for example that vaccines cause

626
00:27:40,850 --> 00:27:38,909
autism Oh Richard you've opened a

627
00:27:43,880 --> 00:27:40,860
Pandora's box there we know that

628
00:27:45,799 --> 00:27:43,890
vaccines don't cause autism actually but

629
00:27:47,270 --> 00:27:45,809
isn't it pernicious the way that stays

630
00:27:48,890 --> 00:27:47,280
despite evidence and you look at

631
00:27:50,750 --> 00:27:48,900
Scandinavian evidence and you look at

632
00:27:53,029 --> 00:27:50,760
you look at the evidence that it came

633
00:27:55,250 --> 00:27:53,039
from originally and how Lancet has come

634
00:28:00,110 --> 00:27:55,260
out and said this was biased this is

635
00:28:01,490 --> 00:28:00,120
been completely discredited and yet it

636
00:28:03,649 --> 00:28:01,500
sticks doesn't appear I guess because

637
00:28:06,230 --> 00:28:03,659
people with kids with autism a desperate

638
00:28:08,060 --> 00:28:06,240

to find out why and there's a smoking

639

00:28:09,980 --> 00:28:08,070

gun so someone somehow believes it's

640

00:28:11,990 --> 00:28:09,990

immunization well I think there's two

641

00:28:14,029 --> 00:28:12,000

reasons one of them is that we don't

642

00:28:17,810 --> 00:28:14,039

know yet exactly what causes autism

643

00:28:20,480 --> 00:28:17,820

there's no cure for autism also the time

644

00:28:21,980 --> 00:28:20,490

of onset or diagnosis of autism Cohen

645

00:28:25,400 --> 00:28:21,990

sides with the time that kids are

646

00:28:27,890 --> 00:28:25,410

receiving quite a few vaccinations so it

647

00:28:29,510 --> 00:28:27,900

looks if someone if the child gets a

648

00:28:32,419 --> 00:28:29,520

vaccination and then they're diagnosed

649

00:28:34,220 --> 00:28:32,429

with autism that's a people make their

650

00:28:35,540 --> 00:28:34,230

connection well it must be the vaccine

651
00:28:37,820 --> 00:28:35,550
because they were fine before they got

652
00:28:39,380 --> 00:28:37,830
that and of course that is a connection

653
00:28:41,360 --> 00:28:39,390
that people will make but it's not the

654
00:28:43,370 --> 00:28:41,370
case what do we say correlation isn't

655
00:28:45,020 --> 00:28:43,380
cause it's not equals causation yeah I

656
00:28:47,030 --> 00:28:45,030
mean it's like saying I go to bed every

657
00:28:48,560 --> 00:28:47,040
night and the Sun comes up in the

658
00:28:50,810 --> 00:28:48,570
morning therefore I cause the Sun to

659
00:28:52,700 --> 00:28:50,820
come up well no that's going to happen

660
00:28:54,860 --> 00:28:52,710
anyway there's no relation but you

661
00:28:56,750 --> 00:28:54,870
didn't cause it yeah Rachel Dunlop is

662
00:28:58,490 --> 00:28:56,760
heading to a postdoctoral fellow at the

663
00:29:00,350 --> 00:28:58,500

University of Technology in Sydney where

664

00:29:01,570 --> 00:29:00,360

she is she written columns for the

665

00:29:03,530 --> 00:29:01,580

conversation that we're having

666

00:29:05,710 --> 00:29:03,540

conversation about she's also vice

667

00:29:07,400 --> 00:29:05,720

president of the Australian skeptics

668

00:29:10,490 --> 00:29:07,410

incorporated as opposed to Vince

669

00:29:12,580 --> 00:29:10,500

Association and her study of fielder

670

00:29:14,630 --> 00:29:12,590

study has been immunization and

671

00:29:15,890 --> 00:29:14,640

immunology you know it's with that in

672

00:29:19,340 --> 00:29:15,900

mind that we're chatting about the rates

673

00:29:22,100 --> 00:29:19,350

of immunization in Australia why is this

674

00:29:24,290 --> 00:29:22,110

anyone's concern you know my kid is my

675

00:29:25,940 --> 00:29:24,300

kid my choices my choice shouldn't be of

676
00:29:29,720 --> 00:29:25,950
concern to you and your vaccinated

677
00:29:31,190 --> 00:29:29,730
choice yeah I think a vaccination is

678
00:29:33,230 --> 00:29:31,200
more than a personal choice really its

679
00:29:36,020 --> 00:29:33,240
community responsibility and the reason

680
00:29:38,240 --> 00:29:36,030
for that is that people that can't get

681
00:29:40,460 --> 00:29:38,250
fully that can't get vaccinated do exist

682
00:29:42,410 --> 00:29:40,470
in our community there are children who

683
00:29:44,660 --> 00:29:42,420
maybe are too young to have received all

684
00:29:46,669 --> 00:29:44,670
their vaccinations and so until they've

685
00:29:49,040 --> 00:29:46,679
got their entire course of childhood

686
00:29:50,900 --> 00:29:49,050
schedule they are still vulnerable and

687
00:29:53,900 --> 00:29:50,910
they're still likely to catch

688
00:29:56,030 --> 00:29:53,910

vaccine-preventable diseases sorry yeah

689

00:29:58,130 --> 00:29:56,040

I can example that phase in ballarat Fey

690

00:29:59,360 --> 00:29:58,140

you know all about someone catching a

691

00:30:02,000 --> 00:29:59,370

disease when you're too young to be

692

00:30:04,520 --> 00:30:02,010

vaccinated don't you yes my grandson was

693

00:30:06,380 --> 00:30:04,530

this and two months old when he came

694

00:30:08,560 --> 00:30:06,390

contact with a child who had not been

695

00:30:13,160 --> 00:30:08,570

vaccinated and obviously was carrying

696

00:30:14,930 --> 00:30:13,170

the germ whatever and we need yet he

697

00:30:18,740 --> 00:30:14,940

nearly died he was in and out of

698

00:30:21,020 --> 00:30:18,750

hospital for a year it was a being of

699

00:30:23,900 --> 00:30:21,030

pattern this was whooping cough in soft

700

00:30:26,000 --> 00:30:23,910

yeah it is the most horrific thing to

701
00:30:28,280 --> 00:30:26,010
watch because they literally stopped

702
00:30:31,190 --> 00:30:28,290
breathing and they turn blue and this

703
00:30:33,769 --> 00:30:31,200
tiny little baby of was just appalling

704
00:30:36,879 --> 00:30:33,779
so even if there was

705
00:30:40,039 --> 00:30:36,889
you know a chance I couldn't countenance

706
00:30:44,719 --> 00:30:40,049
people not having it issues we've had

707
00:30:46,310 --> 00:30:44,729
our boosters subsequent children but you

708
00:30:49,489 --> 00:30:46,320
know you look at a two month old child

709
00:30:50,899 --> 00:30:49,499
and I remember hearing on Reds program

710
00:30:53,239 --> 00:30:50,909
one time he was talking to a doctor

711
00:30:56,450 --> 00:30:53,249
whose own child was in that same

712
00:30:58,489 --> 00:30:56,460
situation and it was exactly the same

713
00:31:00,289 --> 00:30:58,499

time which is but these are people

714

00:31:01,849 --> 00:31:00,299

who've made a choice without seeing the

715

00:31:04,999 --> 00:31:01,859

wider picture that's impact on the

716

00:31:07,339 --> 00:31:05,009

society they live in rachel is probably

717

00:31:09,049 --> 00:31:07,349

outside our scope to to start to have a

718

00:31:10,459 --> 00:31:09,059

philosophical discussion event are we

719

00:31:12,979 --> 00:31:10,469

thinking of ourselves too much as a

720

00:31:15,799 --> 00:31:12,989

society unless about the needs of

721

00:31:17,719 --> 00:31:15,809

society in general and or does it lead

722

00:31:19,669 --> 00:31:17,729

us on to this kind of thinking but that

723

00:31:22,639 --> 00:31:19,679

heard let's talk for a moment about herd

724

00:31:24,709 --> 00:31:22,649

immunity what is that yeah well I prefer

725

00:31:26,029 --> 00:31:24,719

to call it community immunity Richard

726

00:31:28,399 --> 00:31:26,039

because it sounds a bit more warm and

727

00:31:30,649 --> 00:31:28,409

fuzzy and basically it means that we

728

00:31:32,690 --> 00:31:30,659

need a level of vaccination in the

729

00:31:34,669 --> 00:31:32,700

community to prevent the outbreak of

730

00:31:36,109 --> 00:31:34,679

disease and that varies for different

731

00:31:38,719 --> 00:31:36,119

vaccines it varies for different

732

00:31:40,969 --> 00:31:38,729

diseases but if we have roughly ninety

733

00:31:43,219 --> 00:31:40,979

five percent of the population immunized

734

00:31:45,229 --> 00:31:43,229

against a certain disease then there's

735

00:31:47,239 --> 00:31:45,239

no opportunity for it to have outbreaks

736

00:31:49,700 --> 00:31:47,249

and to spread through the community so

737

00:31:52,579 --> 00:31:49,710

we call this community immunity and that

738

00:31:54,409 --> 00:31:52,589

allows us to protect those like what

739

00:31:56,570 --> 00:31:54,419

Faye was referring to her grandson who

740

00:31:58,099 --> 00:31:56,580

got pertussis people that can't be

741

00:32:00,709 --> 00:31:58,109

vaccinated who may have cancer or

742

00:32:03,369 --> 00:32:00,719

receiving chemotherapy elderly people

743

00:32:05,959 --> 00:32:03,379

who are particularly susceptible to

744

00:32:08,690 --> 00:32:05,969

vaccine-preventable diseases and this

745

00:32:10,489 --> 00:32:08,700

stops these outbreaks from starting and

746

00:32:12,019 --> 00:32:10,499

we can when this herd immunity or

747

00:32:13,369 --> 00:32:12,029

community I mean that he breaks down

748

00:32:14,899 --> 00:32:13,379

that's when we see these

749

00:32:16,549 --> 00:32:14,909

vaccine-preventable disease of course

750

00:32:18,859 --> 00:32:16,559

before it breaks down there's a certain

751
00:32:20,839 --> 00:32:18,869
number who can slip stream the herd by

752
00:32:23,959 --> 00:32:20,849
not having it done but figuring that

753
00:32:26,029 --> 00:32:23,969
I've on LC I need some it is my child

754
00:32:28,070 --> 00:32:26,039
yeah they're relying on the herd if you

755
00:32:30,169 --> 00:32:28,080
like to protect themselves and so this

756
00:32:32,089 --> 00:32:30,179
is when people will say well my child

757
00:32:34,369 --> 00:32:32,099
has never been vaccinated and he or she

758
00:32:35,959 --> 00:32:34,379
is still very healthy well in most cases

759
00:32:38,180 --> 00:32:35,969
you're relying on the fact that everyone

760
00:32:41,570 --> 00:32:38,190
else around you is vaccine don't go to

761
00:32:45,289 --> 00:32:41,580
parts of Africa and not ours the same

762
00:32:46,669 --> 00:32:45,299
man is intuitive hey Graham hello Graham

763
00:32:47,830 --> 00:32:46,679

what were you what did you want to say

764

00:32:51,230 --> 00:32:47,840

about the Italian Court

765

00:32:54,410 --> 00:32:51,240

the italian court found that the MMR

766

00:32:59,420 --> 00:32:54,420

vaccine causes autism what you is that

767

00:33:03,020 --> 00:32:59,430

that is 2012 so in your mind what does

768

00:33:05,180 --> 00:33:03,030

that mean that means that when the child

769

00:33:07,160 --> 00:33:05,190

when they had the vaccine and they go

770

00:33:09,710 --> 00:33:07,170

home and they their crook the next day

771

00:33:13,100 --> 00:33:09,720

and they say well it's just a case of

772

00:33:15,050 --> 00:33:13,110

it's coincidental that it is not are you

773

00:33:16,280 --> 00:33:15,060

taking that decision if you've got the

774

00:33:17,990 --> 00:33:16,290

decision right against any other

775

00:33:19,250 --> 00:33:18,000

evidence do would that mean that for

776

00:33:21,530 --> 00:33:19,260

example you wouldn't have your kids

777

00:33:23,630 --> 00:33:21,540

vaccinated because of that I time case

778

00:33:25,820 --> 00:33:23,640

are very careful about any vaccines that

779

00:33:27,320 --> 00:33:25,830

all would give them so what would what

780

00:33:31,070 --> 00:33:27,330

does that mean being very careful or

781

00:33:34,790 --> 00:33:31,080

what would you do and just just if I can

782

00:33:36,950 --> 00:33:34,800

digress so attorneys for the Bush

783

00:33:39,620 --> 00:33:36,960

administration asked a federal court on

784

00:33:43,040 --> 00:33:39,630

Monday to order the documents on

785

00:33:45,380 --> 00:33:43,050

hundreds of cases of autism allegedly

786

00:33:49,280 --> 00:33:45,390

caused by childhood vaccines to be kept

787

00:33:51,200 --> 00:33:49,290

from the public Ryan which comes it back

788

00:33:52,610 --> 00:33:51,210

to it how would you judge back to the

789

00:33:54,890 --> 00:33:52,620

question how would you judge which

790

00:33:56,450 --> 00:33:54,900

vaccines you said you'd be very careful

791

00:33:59,150 --> 00:33:56,460

how does that work what would you do

792

00:34:03,680 --> 00:33:59,160

well you know I mean they can just keep

793

00:34:04,790 --> 00:34:03,690

inventing vaccines right so yeah but I'm

794

00:34:06,860 --> 00:34:04,800

getting down to how would you make the

795

00:34:08,720 --> 00:34:06,870

choice about which vaccines you'd give

796

00:34:11,210 --> 00:34:08,730

your children in which you wouldn't I

797

00:34:14,120 --> 00:34:11,220

would be would be very over to my

798

00:34:17,080 --> 00:34:14,130

homework and your homework would be

799

00:34:21,350 --> 00:34:17,090

better than medical authorities because

800

00:34:23,510 --> 00:34:21,360

because it would be my only but ready

801
00:34:26,480 --> 00:34:23,520
yeah but Richard if I can also just as a

802
00:34:28,850 --> 00:34:26,490
Japanese had a very hard death rate in

803
00:34:30,790 --> 00:34:28,860
children and they withdrew all vaccines

804
00:34:33,620 --> 00:34:30,800
until they were two years of age and

805
00:34:37,360 --> 00:34:33,630
then I have one I think the lowest death

806
00:34:39,710 --> 00:34:37,370
rate among entrance in the world okay

807
00:34:41,480 --> 00:34:39,720
these are a lot of interesting stats and

808
00:34:43,820 --> 00:34:41,490
and they're reworkings of a whole lot of

809
00:34:45,710 --> 00:34:43,830
others I guess what causes my concern is

810
00:34:47,840 --> 00:34:45,720
the assumption that you will research

811
00:34:49,400 --> 00:34:47,850
better than any medical facility but

812
00:34:51,440 --> 00:34:49,410
let's see what Rachel has to say Rachel

813
00:34:53,300 --> 00:34:51,450

grams had a chat about what he feels and

814

00:34:55,910 --> 00:34:53,310

he's on yeah well let's touch on the

815

00:34:57,590 --> 00:34:55,920

Italian Court first of all and I think

816

00:34:59,120 --> 00:34:57,600

the difference between evidence you have

817

00:35:01,500 --> 00:34:59,130

in a court and evidence that you get

818

00:35:03,450 --> 00:35:01,510

scientifically is very very different

819

00:35:06,240 --> 00:35:03,460

so in terms of for example there's a

820

00:35:07,650 --> 00:35:06,250

vaccine court in the US where people can

821

00:35:09,780 --> 00:35:07,660

go if they believe their child has been

822

00:35:12,120 --> 00:35:09,790

injured by a vaccine and the evidence

823

00:35:15,810 --> 00:35:12,130

required for people to get compensation

824

00:35:17,580 --> 00:35:15,820

is 50% and a feather which means just a

825

00:35:20,430 --> 00:35:17,590

little bit more than fifty percent

826

00:35:23,220 --> 00:35:20,440

that's designed to compensate parents

827

00:35:25,260 --> 00:35:23,230

but it's not scientifically decided so

828

00:35:28,650 --> 00:35:25,270

you might also recall recently that the

829

00:35:30,180 --> 00:35:28,660

italian court through seismologists into

830

00:35:32,580 --> 00:35:30,190

jail because they didn't predict an

831

00:35:34,710 --> 00:35:32,590

earthquake so you can look at the

832

00:35:36,120 --> 00:35:34,720

scientific evidence to show that MMR

833

00:35:38,220 --> 00:35:36,130

doesn't cause autism which is

834

00:35:40,500 --> 00:35:38,230

overwhelming and we now have many many

835

00:35:43,350 --> 00:35:40,510

studies showing that or you can look at

836

00:35:45,480 --> 00:35:43,360

the the decision of a court which is not

837

00:35:47,400 --> 00:35:45,490

a scientific decision I know which side

838

00:35:49,620 --> 00:35:47,410

I'm going to go with the Japanese study

839

00:35:51,780 --> 00:35:49,630

who they removed everything and the

840

00:35:55,890 --> 00:35:51,790

fatalities went down well they certainly

841

00:35:57,990 --> 00:35:55,900

removed MMR for an in mid nineteen

842

00:35:59,970 --> 00:35:58,000

ninety-three they stopped using the

843

00:36:02,400 --> 00:35:59,980

measles mumps rubella rubella vaccine

844

00:36:04,010 --> 00:36:02,410

for a period of time because they had a

845

00:36:06,390 --> 00:36:04,020

lot of side effects with that particular

846

00:36:07,800 --> 00:36:06,400

MMR vaccine which wasn't being used in

847

00:36:10,710 --> 00:36:07,810

the rest of the world by the way and

848

00:36:13,410 --> 00:36:10,720

interestingly if you thought that the

849

00:36:15,000 --> 00:36:13,420

MMR was causing autism once the Japanese

850

00:36:17,160 --> 00:36:15,010

removed it you would think that autism

851
00:36:20,700 --> 00:36:17,170
would drop dramatically or guess what

852
00:36:22,560 --> 00:36:20,710
happened Richard MMR cases sorry autism

853
00:36:23,970 --> 00:36:22,570
cases continued to rise yeah you'll

854
00:36:26,040 --> 00:36:23,980
notice the evidence he was giving then

855
00:36:28,200 --> 00:36:26,050
said our fatalities increased he didn't

856
00:36:30,210 --> 00:36:28,210
mention that all to autism because as we

857
00:36:32,010 --> 00:36:30,220
know the autism increased it's

858
00:36:33,720 --> 00:36:32,020
interesting is not and I what I find

859
00:36:35,670 --> 00:36:33,730
fascinating is people still argue and go

860
00:36:38,130 --> 00:36:35,680
nod be very careful do my own research

861
00:36:41,940 --> 00:36:38,140
on the internet which is so much better

862
00:36:43,560 --> 00:36:41,950
than say I don't know yeah medical

863
00:36:46,200 --> 00:36:43,570

science during their own who've trained

864

00:36:47,790 --> 00:36:46,210

to do it I just I find that breathtaking

865

00:36:50,490 --> 00:36:47,800

that people can look you in the eye on

866

00:36:52,860 --> 00:36:50,500

go yeah I'd look it up myself and I'd do

867

00:36:54,480 --> 00:36:52,870

it better it's fascinating Rachel thank

868

00:36:56,040 --> 00:36:54,490

you so much I do appreciate Rachel

869

00:36:57,780 --> 00:36:56,050

Dunlop has been who you've been chatting

870

00:36:59,490 --> 00:36:57,790

to a postdoctoral fellow at the

871

00:37:01,640 --> 00:36:59,500

University of Technology in Sydney where

872

00:37:11,500 --> 00:37:01,650

she has for many years studied

873

00:37:11,510 --> 00:37:17,380

Rachel thank you so much a fresh air

874

00:37:17,390 --> 00:37:23,130

you

875

00:37:28,020 --> 00:37:25,890

hi I'm Finn and I'm Rebecca and where

876

00:37:29,790 --> 00:37:28,030

the skipper cons skipper Collins is an

877

00:37:31,470 --> 00:37:29,800

Irish podcast by the Dublin skeptics

878

00:37:33,030 --> 00:37:31,480

society it takes a conversational

879

00:37:34,290 --> 00:37:33,040

reverent look at science news and

880

00:37:37,800 --> 00:37:34,300

skeptical topics from an Irish

881

00:37:41,519 --> 00:37:37,810

perspective you can find us at WWDC

882

00:37:41,529 --> 00:37:47,620

he's strong

883

00:37:55,480 --> 00:37:52,280

here's my not spooky action at a

884

00:38:00,710 --> 00:37:58,730

well i'm here at skeptics in the pub a

885

00:38:01,849 --> 00:38:00,720

lot of people at the bar because dr. H

886

00:38:03,560 --> 00:38:01,859

is not here there's a bit of extra room

887

00:38:05,540 --> 00:38:03,570

and there's a few new people who haven't

888

00:38:07,250 --> 00:38:05,550

been long before sir what's your name my

889

00:38:10,040 --> 00:38:07,260

name is Luke Egan you here for the first

890

00:38:12,849 --> 00:38:10,050

time why is that Luke my friend invited

891

00:38:15,620 --> 00:38:12,859

me on Facebook so there's an example of

892

00:38:16,970 --> 00:38:15,630

new forms of media getting people

893

00:38:18,410 --> 00:38:16,980

involved I guess and how did they know

894

00:38:20,030 --> 00:38:18,420

to invite you it's just a blanket

895

00:38:21,890 --> 00:38:20,040

invitation or have you been skeptical

896

00:38:24,260 --> 00:38:21,900

doubt something in the past I've always

897

00:38:26,329 --> 00:38:24,270

been a skeptic for my whole adult life

898

00:38:29,690 --> 00:38:26,339

and I used to be a subscriber to the

899

00:38:32,420 --> 00:38:29,700

Australian skeptic magazine I should

900

00:38:34,430 --> 00:38:32,430

probably resubscribe well maybe the

901
00:38:36,950 --> 00:38:34,440
online version maybe yeah yeah maybe

902
00:38:39,079 --> 00:38:36,960
download version would be good so I

903
00:38:41,120 --> 00:38:39,089
think he just knew that I would probably

904
00:38:43,190 --> 00:38:41,130
find it worthwhile and I have had a very

905
00:38:44,630 --> 00:38:43,200
good yeah we've got the question of the

906
00:38:46,700 --> 00:38:44,640
week coming up for you but first of all

907
00:38:48,680 --> 00:38:46,710
what's your specialty area what's the

908
00:38:50,060 --> 00:38:48,690
bit of skepticism to get your goat

909
00:38:52,390 --> 00:38:50,070
what's the one you're interested in oh

910
00:38:56,650 --> 00:38:52,400
well I come from a psychology background

911
00:38:59,750 --> 00:38:56,660
so I'm pretty skeptical of various

912
00:39:02,720 --> 00:38:59,760
parapsychological claims you know and

913
00:39:05,240 --> 00:39:02,730

things in in the area of the mind and

914

00:39:07,700 --> 00:39:05,250

the brain and all the kinds of misguided

915

00:39:10,010 --> 00:39:07,710

ideas that go on in that area well one

916

00:39:12,620 --> 00:39:10,020

of them are just pulling out of my jeans

917

00:39:15,859 --> 00:39:12,630

is perhaps the alien abduction theory

918

00:39:17,089 --> 00:39:15,869

and people who have sleep wake sleeping

919

00:39:18,650 --> 00:39:17,099

and they have and they mentioned that

920

00:39:19,849 --> 00:39:18,660

they've injected by aliens when they're

921

00:39:21,849 --> 00:39:19,859

paralyzed would that be part of a

922

00:39:26,900 --> 00:39:21,859

psychological situation was that not

923

00:39:28,730 --> 00:39:26,910

definitely it is also a lot of in the

924

00:39:32,510 --> 00:39:28,740

medical field I work at a Medical

925

00:39:34,760 --> 00:39:32,520

Institute and a lot of sleep because you

926

00:39:36,200 --> 00:39:34,770

don't work at the ponds Institute do you

927

00:39:37,819 --> 00:39:36,210

because I've seen the ponds Institute on

928

00:39:39,829 --> 00:39:37,829

television well as women wearing the

929

00:39:42,260 --> 00:39:39,839

white lab coats doing the makeup stuff

930

00:39:45,950 --> 00:39:42,270

you're not a pond I don't know that our

931

00:39:47,240 --> 00:39:45,960

hands there okay so check yeah but if

932

00:39:50,090 --> 00:39:47,250

you ask the sleep physician they can

933

00:39:52,350 --> 00:39:50,100

tell you all about the

934

00:39:54,300 --> 00:39:52,360

forgive me by murdering the term but

935

00:39:55,950 --> 00:39:54,310

it's like hypnagogic or hypnagogic

936

00:39:57,570 --> 00:39:55,960

hallucinations or something oh that's

937

00:40:00,360 --> 00:39:57,580

pretty close to it sound like that yeah

938

00:40:02,160 --> 00:40:00,370

and what's the psychological area that's

939

00:40:04,440 --> 00:40:02,170

closest to your heart that intersects

940

00:40:09,390 --> 00:40:04,450

with the skepticism I suppose it would

941

00:40:14,250 --> 00:40:09,400

be trying to unravel the confusion

942

00:40:15,950 --> 00:40:14,260

around what role the what role

943

00:40:17,930 --> 00:40:15,960

neuroscience can play in our

944

00:40:20,490 --> 00:40:17,940

understanding of behavior and

945

00:40:23,460 --> 00:40:20,500

psychological states so how do you feel

946

00:40:25,680 --> 00:40:23,470

when you see a TED talk about the

947

00:40:27,270 --> 00:40:25,690

consciousness someone like Rupert

948

00:40:29,550 --> 00:40:27,280

Sheldrake getting up there and saying

949

00:40:31,830 --> 00:40:29,560

that there's a creek cognition of images

950

00:40:33,630 --> 00:40:31,840

and that he's evidence shows that how do

951
00:40:35,700 --> 00:40:33,640
you feel about that oh yeah that reminds

952
00:40:37,350 --> 00:40:35,710
you of this debacle in one of the most

953
00:40:38,550 --> 00:40:37,360
prestigious psych journals the journal

954
00:40:41,360 --> 00:40:38,560
of personality and social psychology

955
00:40:43,860 --> 00:40:41,370
published that awful paper by

956
00:40:47,010 --> 00:40:43,870
what's-his-name that it wasn't Rupert

957
00:40:48,270 --> 00:40:47,020
shelter was it wasn't him yes but I

958
00:40:50,600 --> 00:40:48,280
think we know the one who talked yeah

959
00:40:54,330 --> 00:40:50,610
yeah and what was it purporting to prove

960
00:40:56,670 --> 00:40:54,340
precognition yeah and the thing is at no

961
00:40:59,160 --> 00:40:56,680
point in the paper did he posit a

962
00:41:04,580 --> 00:40:59,170
mechanism to explain the phenomenon and

963
00:41:07,530 --> 00:41:04,590

to me if you have a mechanism 'less idea

964

00:41:11,130 --> 00:41:07,540

then I would prefer chance as an

965

00:41:14,340 --> 00:41:11,140

explanation although as may be said to

966

00:41:16,350 --> 00:41:14,350

you by a non skeptic when Copernicus and

967

00:41:18,630 --> 00:41:16,360

Galileo originally making their

968

00:41:20,640 --> 00:41:18,640

observations there was planets moving in

969

00:41:22,620 --> 00:41:20,650

odd ways and they hadn't originally

970

00:41:24,210 --> 00:41:22,630

figured out why they were doing it so

971

00:41:26,010 --> 00:41:24,220

they hadn't worked out a mechanism

972

00:41:27,690 --> 00:41:26,020

originally either

973

00:41:30,540 --> 00:41:27,700

they hadn't but they didn't posit a

974

00:41:31,590 --> 00:41:30,550

brand new theory so they kind of SAT

975

00:41:33,990 --> 00:41:31,600

there and said here are the observations

976

00:41:35,930 --> 00:41:34,000

whereas this paper put forth

977

00:41:38,520 --> 00:41:35,940

observations and then said therefore

978

00:41:40,500 --> 00:41:38,530

precognition and that is pushing it way

979

00:41:44,090 --> 00:41:40,510

25 you if you had a mechanism to go with

980

00:41:45,990 --> 00:41:44,100

that hypothesis then okay might still be

981

00:41:48,270 --> 00:41:46,000

lunacy but at least you've got a

982

00:41:50,010 --> 00:41:48,280

mechanism that we can talk about without

983

00:41:51,870 --> 00:41:50,020

a mechanism i prefer chance as the best

984

00:41:53,250 --> 00:41:51,880

explanation and you've run it up for the

985

00:41:55,350 --> 00:41:53,260

first time you had skeptics at the pub

986

00:41:57,300 --> 00:41:55,360

at the coronation hotel and by the way

987

00:41:59,310 --> 00:41:57,310

the next one everybody is on thursday

988

00:42:01,110 --> 00:41:59,320

the sixth of June at the coronation

989

00:42:03,060 --> 00:42:01,120

hotel upstairs in Sydney come along

990

00:42:07,020 --> 00:42:03,070

we'll see you then would you recommend

991

00:42:08,460 --> 00:42:07,030

the time definitely yeah it was any what

992

00:42:11,100 --> 00:42:08,470

it's pretty well oh it gets wilder from

993

00:42:12,330 --> 00:42:11,110

here you have any wait wait till the

994

00:42:14,670 --> 00:42:12,340

strippers arrived they're skeptical

995

00:42:16,050 --> 00:42:14,680

strippers so they don't actually take

996

00:42:17,850 --> 00:42:16,060

off their clothes they just tell you

997

00:42:20,100 --> 00:42:17,860

that they might they're actually quantum

998

00:42:21,300 --> 00:42:20,110

strippers quantum strippers here so if I

999

00:42:22,740 --> 00:42:21,310

put them in a box and didn't observe

1000

00:42:25,310 --> 00:42:22,750

them would they be then they know they'd

1001
00:42:27,150 --> 00:42:25,320
be naked but you wouldn't see it okay

1002
00:42:29,190 --> 00:42:27,160
thanks Luke and have you got a website

1003
00:42:31,200 --> 00:42:29,200
or a blog or anything I'm go to everyone

1004
00:42:33,150 --> 00:42:31,210
we can debate you I do it's not

1005
00:42:36,660 --> 00:42:33,160
skeptically oriented but it's called

1006
00:42:39,060 --> 00:42:36,670
pseudo photos of cats haha it's a bit

1007
00:42:40,710 --> 00:42:39,070
more a little bit of hive rather than

1008
00:42:44,730 --> 00:42:40,720
that i have a blog called sydney

1009
00:42:47,100 --> 00:42:44,740
sidewinder wordpress com i talk about

1010
00:42:48,900 --> 00:42:47,110
how great Sydney years and things to do

1011
00:42:51,450 --> 00:42:48,910
around here so when you're not when

1012
00:42:52,680 --> 00:42:51,460
you're not a skeptical meaning there are

1013
00:42:55,140 --> 00:42:52,690

other things you can get up to as well

1014

00:42:57,180 --> 00:42:55,150

and because the question of the night it

1015

00:43:00,630 --> 00:42:57,190

should skeptic still be worried about

1016

00:43:03,150 --> 00:43:00,640

the issue of UFOs me I think that the

1017

00:43:04,500 --> 00:43:03,160

the reveal is just around the corner I'm

1018

00:43:06,540 --> 00:43:04,510

sure they're going to be coming up and

1019

00:43:08,190 --> 00:43:06,550

say yes it was all real all the time

1020

00:43:09,870 --> 00:43:08,200

it's been misinformation that's how I

1021

00:43:13,080 --> 00:43:09,880

feel how do you feel should skeptics be

1022

00:43:16,230 --> 00:43:13,090

still bothered with UFOs I think if we

1023

00:43:18,090 --> 00:43:16,240

have time that's fine but with things

1024

00:43:20,100 --> 00:43:18,100

like the anti-vaccine which is like

1025

00:43:21,960 --> 00:43:20,110

those guys have blood on their hands as

1026

00:43:24,390 --> 00:43:21,970

far as I'm concerned so if we can

1027

00:43:25,890 --> 00:43:24,400

prevent people from dying needlessly and

1028

00:43:27,840 --> 00:43:25,900

then still have time left over to debate

1029

00:43:29,740 --> 00:43:27,850

UFOs that's fine but if not let's

1030

00:43:32,230 --> 00:43:29,750

prioritize the real

1031

00:43:33,730 --> 00:43:32,240

life or death stuff I couldn't agree

1032

00:43:35,380 --> 00:43:33,740

more with you and that's why I'm usually

1033

00:43:36,220 --> 00:43:35,390

very silent on that issue because they

1034

00:43:38,350 --> 00:43:36,230

need people know what they're talking

1035

00:43:41,740 --> 00:43:38,360

about like dr. reaching people like me

1036

00:43:44,440 --> 00:43:41,750

coming out doing you can only damage the

1037

00:43:47,040 --> 00:43:44,450

cause I said that's a bit that's fair

1038

00:43:49,720 --> 00:43:47,050

enough yeah yeah I'll go home and I'll

1039

00:43:51,220 --> 00:43:49,730

give dr. ratio love support while she's

1040

00:43:55,170 --> 00:43:51,230

doing the blogging but I'll be watching

1041

00:43:58,210 --> 00:43:55,180

ancient aliens sounds good to me too

1042

00:43:59,920 --> 00:43:58,220

what what 70-plus people here are

1043

00:44:01,390 --> 00:43:59,930

upstairs at the coronation hotel of

1044

00:44:02,770 --> 00:44:01,400

course as I said the next one is on the

1045

00:44:04,810 --> 00:44:02,780

sixth of June come along and you can

1046

00:44:07,000 --> 00:44:04,820

meet people like Jessica's una hello

1047

00:44:08,320 --> 00:44:07,010

hello in DD how are you pretty good the

1048

00:44:09,970 --> 00:44:08,330

name might be singer but she's never

1049

00:44:12,130 --> 00:44:09,980

been on the voice or australia's Got

1050

00:44:15,190 --> 00:44:12,140

Talent although apparently you do in

1051
00:44:17,860 --> 00:44:15,200
certain areas oh well I'll just let my

1052
00:44:21,010 --> 00:44:17,870
reputation precede me in that regard tap

1053
00:44:22,000 --> 00:44:21,020
dancing now richard is our now richard

1054
00:44:23,350 --> 00:44:22,010
has sent the question for the night

1055
00:44:25,120 --> 00:44:23,360
should the skeptics still be worried

1056
00:44:26,800 --> 00:44:25,130
about UFOs and I was just talking to a

1057
00:44:28,300 --> 00:44:26,810
first-time skeptic here and he thought

1058
00:44:30,040 --> 00:44:28,310
that we've got bigger concerns like

1059
00:44:31,330 --> 00:44:30,050
vaccinations but do you feel it's

1060
00:44:35,950 --> 00:44:31,340
something a sceptic should be concerned

1061
00:44:39,850 --> 00:44:35,960
with at all oh well that's a hard one on

1062
00:44:41,380 --> 00:44:39,860
we we have a skeptic one of us one of

1063
00:44:43,690 --> 00:44:41,390

our people down in Melbourne Steve

1064

00:44:45,910 --> 00:44:43,700

Roberts has done a lot of work on the on

1065

00:44:49,270 --> 00:44:45,920

the UFO phenomena or the you know the

1066

00:44:51,400 --> 00:44:49,280

belief in in alien abductions and he

1067

00:44:55,060 --> 00:44:51,410

said he did a very interesting talk

1068

00:44:58,090 --> 00:44:55,070

about how the how the reports have

1069

00:45:00,790 --> 00:44:58,100

so-called at that abductions spike every

1070

00:45:04,900 --> 00:45:00,800

time there's an alien movie or a UFO

1071

00:45:06,610 --> 00:45:04,910

movie and it's it's some so it's it's I

1072

00:45:09,160 --> 00:45:06,620

think it's interesting from that point

1073

00:45:11,590 --> 00:45:09,170

of view I think it's it's a phenomenon

1074

00:45:14,920 --> 00:45:11,600

that we need to keep tabs on

1075

00:45:17,740 --> 00:45:14,930

it's also something that people do get

1076

00:45:19,810 --> 00:45:17,750

very distressed about so if we can help

1077

00:45:22,450 --> 00:45:19,820

them and reassure them that's good I

1078

00:45:24,520 --> 00:45:22,460

remember our former executive officer

1079

00:45:27,010 --> 00:45:24,530

Barry Williams he would always get phone

1080

00:45:28,450 --> 00:45:27,020

calls from very distressed people often

1081

00:45:30,970 --> 00:45:28,460

in the middle of the night when channel

1082

00:45:33,580 --> 00:45:30,980

7 had shown some bloody documentary or

1083

00:45:36,670 --> 00:45:33,590

other and they just wanted reassurance

1084

00:45:40,290 --> 00:45:36,680

and and if we can help and perhaps yo

1085

00:45:42,760 --> 00:45:40,300

just just give a rational explanation

1086

00:45:45,520 --> 00:45:42,770

yeah I think there's still a role for

1087

00:45:48,070 --> 00:45:45,530

that ok if anyone would like to go back

1088

00:45:50,830 --> 00:45:48,080

if they can I'll recap for them I spoke

1089

00:45:53,140 --> 00:45:50,840

to Steve novella about this issue at tam

1090

00:45:55,210 --> 00:45:53,150

Australia when he was out and and I said

1091

00:45:57,520 --> 00:45:55,220

there's a chance UFOs are real and he

1092

00:45:58,960 --> 00:45:57,530

said well it's so statistically smaller

1093

00:46:01,810 --> 00:45:58,970

they might be real but it's probably not

1094

00:46:04,030 --> 00:46:01,820

worth bothering to look and I Reese and

1095

00:46:05,770 --> 00:46:04,040

also I chatted with an Australian

1096

00:46:07,690 --> 00:46:05,780

researcher had gone around the world

1097

00:46:10,450 --> 00:46:07,700

following this at various spots around

1098

00:46:11,920 --> 00:46:10,460

the world of a hotspot so to me that

1099

00:46:14,020 --> 00:46:11,930

there is something going on that's worth

1100

00:46:16,450 --> 00:46:14,030

studying even if it's just psychological

1101
00:46:18,850 --> 00:46:16,460
or its cultural yes definitely from a

1102
00:46:21,940 --> 00:46:18,860
psychological cultural point of view but

1103
00:46:26,050 --> 00:46:21,950
in terms of you know do they come and

1104
00:46:29,380 --> 00:46:26,060
visit us I don't think so yeah so so so

1105
00:46:32,560 --> 00:46:29,390
yeah chasing going to these UFO

1106
00:46:35,800 --> 00:46:32,570
conventions and chasing watching

1107
00:46:37,720 --> 00:46:35,810
watching very grainy and and bad

1108
00:46:40,030 --> 00:46:37,730
photographs of nothing in particular

1109
00:46:42,640 --> 00:46:40,040
that's a bit of a waste of time but

1110
00:46:44,560 --> 00:46:42,650
little bit yeah I'm a big fan of out of

1111
00:46:47,290 --> 00:46:44,570
the blue the Fox films have been made

1112
00:46:49,420 --> 00:46:47,300
and I know what I saw now I know what I

1113
00:46:52,780 --> 00:46:49,430

saw could be actually retitled argument

1114

00:46:54,370 --> 00:46:52,790

from Authority because it's a and by the

1115

00:46:58,360 --> 00:46:54,380

way we just had a lecture here by Tim

1116

00:47:00,010 --> 00:46:58,370

mendham who said don't use that don't

1117

00:47:01,450 --> 00:47:00,020

bring up logical fallacies when you're

1118

00:47:03,370 --> 00:47:01,460

having a conversation with the media or

1119

00:47:05,319 --> 00:47:03,380

with people because people go look

1120

00:47:07,660 --> 00:47:05,329

pointy-headed don't they straight away

1121

00:47:10,809 --> 00:47:07,670

absolutely yeah oh yeah oh yeah and

1122

00:47:12,729 --> 00:47:10,819

basically it's a it's lawyers its pilots

1123

00:47:14,949 --> 00:47:12,739

it's politicians its various people it's

1124

00:47:16,660 --> 00:47:14,959

policemen Air Force people that you

1125

00:47:18,400 --> 00:47:16,670

would think would know what they see in

1126
00:47:19,779 --> 00:47:18,410
the sky that have seen unusual things

1127
00:47:21,640 --> 00:47:19,789
and that's what I know what I saw is

1128
00:47:24,549 --> 00:47:21,650
based around now do you think there's

1129
00:47:27,969 --> 00:47:24,559
any argument there ah well I'm a lawyer

1130
00:47:32,709 --> 00:47:27,979
and you know any anybody and you also

1131
00:47:34,180 --> 00:47:32,719
play one on TV well I wouldn't mind if I

1132
00:47:36,130 --> 00:47:34,190
wouldn't mind collecting a salary for

1133
00:47:38,140 --> 00:47:36,140
doing so open that would be good she SAT

1134
00:47:40,180 --> 00:47:38,150
just behind Ally McBeal if you if you

1135
00:47:42,940 --> 00:47:40,190
freeze the frame you can see her going

1136
00:47:47,049 --> 00:47:42,950
into the unisex toilet yep absolutely so

1137
00:47:51,849 --> 00:47:47,059
yeah so as a lawyer the the belief is

1138
00:47:55,719 --> 00:47:51,859

that firsthand evidence is best evidence

1139

00:47:58,569 --> 00:47:55,729

and firsthand testimony and what you see

1140

00:48:01,599 --> 00:47:58,579

is the best evidence but I think as

1141

00:48:04,359 --> 00:48:01,609

skeptics we all know how our brain can

1142

00:48:08,410 --> 00:48:04,369

fool us how our perceptions could fool

1143

00:48:11,319 --> 00:48:08,420

us and how that can be that can be very

1144

00:48:13,569 --> 00:48:11,329

misleading as a lawyer do you think that

1145

00:48:16,509 --> 00:48:13,579

perhaps William Shatner's performances

1146

00:48:19,059 --> 00:48:16,519

Danny crane is the greatest portrayal of

1147

00:48:22,660 --> 00:48:19,069

a lawyer on screen or on television ever

1148

00:48:26,019 --> 00:48:22,670

in the history of the world um I'm sorry

1149

00:48:27,939 --> 00:48:26,029

to admit I've never seen it well I know

1150

00:48:30,039 --> 00:48:27,949

isn't that if we get a lawyer who's

1151

00:48:31,839 --> 00:48:30,049

never watched Boston well that's it then

1152

00:48:33,549 --> 00:48:31,849

look I'm gonna go talk to someone else I

1153

00:48:36,099 --> 00:48:33,559

don't watch legal programs I'm sorry the

1154

00:48:38,559 --> 00:48:36,109

only the only 1i watches Rumpel I love

1155

00:48:40,359 --> 00:48:38,569

rumble stop sniggering no no no look

1156

00:48:42,849 --> 00:48:40,369

look it's just as interesting as the

1157

00:48:46,089 --> 00:48:42,859

Duchess of duke street oh I remember

1158

00:48:47,949 --> 00:48:46,099

that oh my god I've been around some

1159

00:48:50,019 --> 00:48:47,959

more people thank you for your time no

1160

00:48:52,239 --> 00:48:50,029

worries take care may not Richard

1161

00:48:56,019 --> 00:48:52,249

Saunders is back from overseas he's been

1162

00:48:57,910 --> 00:48:56,029

banned from Czechoslovakia Norway there

1163

00:49:00,069 --> 00:48:57,920

was that incident in Trondheim that the

1164

00:49:01,989 --> 00:49:00,079

police are still looking for him for he

1165

00:49:04,509 --> 00:49:01,999

was seen sitting in a park talking to a

1166

00:49:05,979 --> 00:49:04,519

microphone for a while there and we're

1167

00:49:07,630 --> 00:49:05,989

actually in our special studio which is

1168

00:49:09,880 --> 00:49:07,640

the corridor see you later people thanks

1169

00:49:11,529 --> 00:49:09,890

for coming we had some lovely people

1170

00:49:14,019 --> 00:49:11,539

there and Richard Saunders how are you

1171

00:49:15,130 --> 00:49:14,029

jet-lagged may not look at now you had a

1172

00:49:16,870 --> 00:49:15,140

great time you've been around the world

1173

00:49:17,950 --> 00:49:16,880

being skeptical and I've been asking

1174

00:49:20,079 --> 00:49:17,960

people about you

1175

00:49:22,180 --> 00:49:20,089

what's your feeling about whether UFO

1176
00:49:24,220 --> 00:49:22,190
should still be tackled by the skeptical

1177
00:49:26,079 --> 00:49:24,230
movement or not oh I think it's they

1178
00:49:27,820 --> 00:49:26,089
should because it's a good way to for

1179
00:49:30,550 --> 00:49:27,830
young skeptics to cut their teeth you

1180
00:49:34,210 --> 00:49:30,560
know look at the investigations and how

1181
00:49:37,990 --> 00:49:34,220
to talk to people what what witness

1182
00:49:39,880 --> 00:49:38,000
accounts mean and all the rest of it but

1183
00:49:42,640 --> 00:49:39,890
it's something has been studied for so

1184
00:49:44,829 --> 00:49:42,650
many years now and it's still the the

1185
00:49:47,260 --> 00:49:44,839
results are pretty pretty crummy this

1186
00:49:49,359 --> 00:49:47,270
Carl Sagan would say but it's still it's

1187
00:49:52,060 --> 00:49:49,369
a worthwhile endeavor especially when

1188
00:49:54,370 --> 00:49:52,070

you're learning skepticism now I hark

1189

00:49:56,200 --> 00:49:54,380

back to the dirty disbelievers show that

1190

00:49:57,970 --> 00:49:56,210

I did with you dr. H E and Jamie

1191

00:49:59,560 --> 00:49:57,980

Leonardo and as you know Jamie Leonardo

1192

00:50:01,750 --> 00:49:59,570

is is very interested in investigating

1193

00:50:03,579 --> 00:50:01,760

this area and he brought up something

1194

00:50:06,250 --> 00:50:03,589

which I haven't thought about in that

1195

00:50:07,930 --> 00:50:06,260

most skeptics would automatically think

1196

00:50:09,970 --> 00:50:07,940

that we're looking at an alien life form

1197

00:50:11,589 --> 00:50:09,980

and it could be multi-dimensional or

1198

00:50:13,150 --> 00:50:11,599

something like that which I tend to go

1199

00:50:15,760 --> 00:50:13,160

with their of course there's no proof

1200

00:50:18,370 --> 00:50:15,770

for that hypothesis if you could call it

1201

00:50:20,079 --> 00:50:18,380

that do you think that they're me

1202

00:50:21,370 --> 00:50:20,089

thinking like that I need to put my head

1203

00:50:23,230 --> 00:50:21,380

in the bucket of water or not and you

1204

00:50:24,609 --> 00:50:23,240

Richard's got that smile on his face it

1205

00:50:26,980 --> 00:50:24,619

goes yeah we need to put my dad's head

1206

00:50:28,710 --> 00:50:26,990

in the bucket of water yeah well I know

1207

00:50:31,270 --> 00:50:28,720

that's perfectly you a perfectly good

1208

00:50:33,670 --> 00:50:31,280

line of thinking may not know it really

1209

00:50:35,680 --> 00:50:33,680

is I mean why would it have to be aliens

1210

00:50:37,750 --> 00:50:35,690

but why not think of is it a

1211

00:50:40,690 --> 00:50:37,760

multi-dimensional creature from Earth is

1212

00:50:42,430 --> 00:50:40,700

that someone from the future isn't also

1213

00:50:44,200 --> 00:50:42,440

I mean what you know I also think that

1214

00:50:46,720 --> 00:50:44,210

it's a phenomenon worth investigating

1215

00:50:49,060 --> 00:50:46,730

because if it isn't what it what if it's

1216

00:50:50,980 --> 00:50:49,070

a psychological or a cultural thing and

1217

00:50:53,560 --> 00:50:50,990

as I've mentioned my conversation with

1218

00:50:54,910 --> 00:50:53,570

steve novella at the TAM Australia he

1219

00:50:56,349 --> 00:50:54,920

thought it's so small it's not worth

1220

00:50:58,839 --> 00:50:56,359

investigating because of a percentage

1221

00:51:01,329 --> 00:50:58,849

chance of being realest so mean small

1222

00:51:03,490 --> 00:51:01,339

but I yeah I don't but I think that if

1223

00:51:05,710 --> 00:51:03,500

it is a cultural or psychological that

1224

00:51:08,680 --> 00:51:05,720

activity or event that's worth

1225

00:51:10,630 --> 00:51:08,690

investigating yes it is but not not so

1226
00:51:13,000 --> 00:51:10,640
much from what we might call a classical

1227
00:51:15,310 --> 00:51:13,010
skeptical point of view and I look at

1228
00:51:16,870 --> 00:51:15,320
Clark classical skepticism as dating

1229
00:51:18,700 --> 00:51:16,880
back from the 70s when it's all about

1230
00:51:20,410 --> 00:51:18,710
psychics and monsters and UFOs and

1231
00:51:21,820 --> 00:51:20,420
Bigfoot and all that sort of stuff I

1232
00:51:23,859 --> 00:51:21,830
love those sort of things in together

1233
00:51:25,750 --> 00:51:23,869
and obviously you'd be concerned that it

1234
00:51:27,160 --> 00:51:25,760
might distract the movement from other

1235
00:51:29,349 --> 00:51:27,170
ones you consider to be more

1236
00:51:31,480 --> 00:51:29,359
life-threatening such as a vaccination

1237
00:51:35,200 --> 00:51:31,490
and anti medical practices

1238
00:51:36,220 --> 00:51:35,210

well I guess there is an argument for

1239

00:51:38,410 --> 00:51:36,230

that but you know there are a lot of

1240

00:51:40,570 --> 00:51:38,420

skeptics especially a lot of young keen

1241

00:51:42,160 --> 00:51:40,580

skeptics who want to investigate these

1242

00:51:44,350 --> 00:51:42,170

things and I say good luck to them you

1243

00:51:46,720 --> 00:51:44,360

know fine go for it i l've got no

1244

00:51:48,670 --> 00:51:46,730

problem with that and have you got a

1245

00:51:52,060 --> 00:51:48,680

problem with me enjoying the entire

1246

00:51:55,140 --> 00:51:52,070

ancient alien series ah haven't you

1247

00:51:57,700 --> 00:51:55,150

listened to solar flare oh look and

1248

00:51:59,770 --> 00:51:57,710

sidebar people solar flare has come out

1249

00:52:01,420 --> 00:51:59,780

and l've been flooded with well actually

1250

00:52:03,400 --> 00:52:01,430

no emails but Richard might have got a

1251

00:52:05,170 --> 00:52:03,410

couple solar flare it's like commander

1252

00:52:07,420 --> 00:52:05,180

Saunders has done a fantastic job

1253

00:52:09,790 --> 00:52:07,430

Captain Saunders I was promoted you know

1254

00:52:11,620 --> 00:52:09,800

I did get a message about solar flare

1255

00:52:13,780 --> 00:52:11,630

and it said that you stole the show oh

1256

00:52:15,970 --> 00:52:13,790

here's three new people going party

1257

00:52:17,500 --> 00:52:15,980

later this is I'm talking to Richard

1258

00:52:18,700 --> 00:52:17,510

Saunders cuz he's an alcoholic you can't

1259

00:52:22,270 --> 00:52:18,710

chat to him later you got to get him

1260

00:52:23,680 --> 00:52:22,280

early still upright yes no they said

1261

00:52:25,510 --> 00:52:23,690

that you stole the show so there you go

1262

00:52:27,430 --> 00:52:25,520

well yeah I did and that's why it wasn't

1263

00:52:30,130 --> 00:52:27,440

out for a while I may not give it back

1264

00:52:32,440 --> 00:52:30,140

look it was a lot of fun to do and a lot

1265

00:52:33,700 --> 00:52:32,450

of work went into that people and there

1266

00:52:35,500 --> 00:52:33,710

might be another but believing me

1267

00:52:37,630 --> 00:52:35,510

Richard did a lot of work on that the

1268

00:52:39,780 --> 00:52:37,640

production and Stefan and everybody was

1269

00:52:43,060 --> 00:52:39,790

involved in it I'm a bit of a fan of

1270

00:52:45,400 --> 00:52:43,070

Elsa st you men will hello i enjoy

1271

00:52:48,130 --> 00:52:45,410

hearing novella he was just a novella

1272

00:52:49,630 --> 00:52:48,140

like he had that dr. evil touch about

1273

00:52:51,160 --> 00:52:49,640

him he did he hammed it up a bit which

1274

00:52:54,220 --> 00:52:51,170

was great and there's a lot of work

1275

00:52:55,570 --> 00:52:54,230

there may be another 180 a baby and look

1276
00:52:57,310 --> 00:52:55,580
before we finishes or anything we can

1277
00:52:58,930 --> 00:52:57,320
point to people are we're back here at

1278
00:53:00,970 --> 00:52:58,940
the coronation until I mentioned a few

1279
00:53:02,980 --> 00:53:00,980
time on the Thursday the sixth of June

1280
00:53:05,170 --> 00:53:02,990
it's upstairs at the coronation hotel in

1281
00:53:06,760 --> 00:53:05,180
Sydney it's the sixth of June is it no

1282
00:53:08,470 --> 00:53:06,770
that's the next one that's what I'm

1283
00:53:10,780 --> 00:53:08,480
saying it's the next one Sam I'm getting

1284
00:53:12,550 --> 00:53:10,790
people earlier me folks yes that's yes

1285
00:53:14,800 --> 00:53:12,560
we'll see you there okay spoon bending

1286
00:53:18,550 --> 00:53:14,810
lessons okay we're here with our

1287
00:53:20,290 --> 00:53:18,560
Aeronautics correspondent usually if if

1288
00:53:22,690 --> 00:53:20,300

you've seen any show that involves the

1289

00:53:25,240 --> 00:53:22,700

phrase black box so that's not an adult

1290

00:53:26,740 --> 00:53:25,250

movie or a video clip this guy's

1291

00:53:29,530 --> 00:53:26,750

probably seen it

1292

00:53:32,230 --> 00:53:29,540

I tend to read the accident reports more

1293

00:53:34,210 --> 00:53:32,240

than the then you mean they don't you

1294

00:53:35,620 --> 00:53:34,220

like the dramatizations know you know

1295

00:53:37,480 --> 00:53:35,630

the mother with the child and the guy

1296

00:53:39,010 --> 00:53:37,490

who helped invent the IBM computer and

1297

00:53:42,100 --> 00:53:39,020

then the this and that so okay i know i

1298

00:53:43,840 --> 00:53:42,110

know enough of them thinking that what

1299

00:53:45,700 --> 00:53:43,850

is your name sir much your website so we

1300

00:53:50,020 --> 00:53:45,710

can complain to you later my name is

1301
00:53:51,790 --> 00:53:50,030
Robin cleared and my website ok good

1302
00:53:54,670 --> 00:53:51,800
Lee's name goodness knows what will come

1303
00:53:56,110 --> 00:53:54,680
up but I I appear on Google a lot do you

1304
00:53:58,570 --> 00:53:56,120
think skeptics should still concern

1305
00:54:01,240 --> 00:53:58,580
themselves with the phenomena of UFOs or

1306
00:54:03,490 --> 00:54:01,250
is that you know so 10 years ago

1307
00:54:05,050 --> 00:54:03,500
personally I think that it it's the

1308
00:54:07,120 --> 00:54:05,060
major thing on my mind because I haven't

1309
00:54:09,250 --> 00:54:07,130
got the brainpower to work with the

1310
00:54:12,340 --> 00:54:09,260
vaccination issue but what do you think

1311
00:54:14,320 --> 00:54:12,350
about the rest of us I think come I mean

1312
00:54:16,030 --> 00:54:14,330
I always remember I suppose my

1313
00:54:17,650 --> 00:54:16,040

skepticism I'm something echoing

1314

00:54:19,990 --> 00:54:17,660

something that that rupee said on

1315

00:54:22,660 --> 00:54:20,000

skeptic ality once i think but a lot of

1316

00:54:24,730 --> 00:54:22,670

people get into skepticism from the

1317

00:54:26,740 --> 00:54:24,740

wonder of the mystery i remember all the

1318

00:54:28,840 --> 00:54:26,750

us-born kids books when I was in the

1319

00:54:30,730 --> 00:54:28,850

inner 70s use one book of UFOs which i

1320

00:54:32,530 --> 00:54:30,740

still have and the and all these things

1321

00:54:34,660 --> 00:54:32,540

and I think part and at the same time I

1322

00:54:37,260 --> 00:54:34,670

started becoming skeptical about things

1323

00:54:40,090 --> 00:54:37,270

but that was what the excitement was

1324

00:54:41,530 --> 00:54:40,100

Michael Shermer has said that the

1325

00:54:43,180 --> 00:54:41,540

paranormal is a gateway drug to

1326

00:54:45,040 --> 00:54:43,190

skepticism do you think that's true I

1327

00:54:47,320 --> 00:54:45,050

really thought in my I can only speak

1328

00:54:49,570 --> 00:54:47,330

for myself but I think so and I Mikkel

1329

00:54:51,580 --> 00:54:49,580

heard other people say that you know

1330

00:54:53,530 --> 00:54:51,590

people like sweepy say similar things I

1331

00:54:55,320 --> 00:54:53,540

think and it's also Benjamin Radford i

1332

00:54:57,790 --> 00:54:55,330

think was saying as Benjamin Radford

1333

00:54:59,170 --> 00:54:57,800

well I mean who told Matt what monster

1334

00:55:00,520 --> 00:54:59,180

talk and something that everyone loves

1335

00:55:02,530 --> 00:55:00,530

that fantastic and they're taking a

1336

00:55:04,090 --> 00:55:02,540

break for a couple of months are they

1337

00:55:05,140 --> 00:55:04,100

are yeah they're taking a break through

1338

00:55:06,370 --> 00:55:05,150

little journal saying that they got a

1339

00:55:08,110 --> 00:55:06,380

few things on I was going to interview

1340

00:55:09,340 --> 00:55:08,120

him do a thing on the show I think

1341

00:55:12,670 --> 00:55:09,350

they're actually taking a break so they

1342

00:55:14,650 --> 00:55:12,680

can avoid me interviewing them ah no

1343

00:55:16,480 --> 00:55:14,660

never never never oh there's something

1344

00:55:18,310 --> 00:55:16,490

there Benjamin Redford in a PhD or

1345

00:55:19,510 --> 00:55:18,320

something that's just like smoke screen

1346

00:55:21,370 --> 00:55:19,520

yeah you're definitely definitely he's

1347

00:55:24,460 --> 00:55:21,380

actually gone up to the mothership for a

1348

00:55:27,160 --> 00:55:24,470

short time yeah so what would you what

1349

00:55:29,200 --> 00:55:27,170

do you think when qualified pilots as in

1350

00:55:31,270 --> 00:55:29,210

the movie that I've I know what I saw

1351
00:55:32,410 --> 00:55:31,280
which is also known as an argument from

1352
00:55:34,390 --> 00:55:32,420
Authority

1353
00:55:36,340 --> 00:55:34,400
what do you think of that sort of thing

1354
00:55:38,050 --> 00:55:36,350
when qualified pilots see something in

1355
00:55:39,940 --> 00:55:38,060
the sky that seems to be flying around

1356
00:55:40,990 --> 00:55:39,950
quite close to them like the incident

1357
00:55:43,240 --> 00:55:41,000
that happened over the English Channel

1358
00:55:45,490 --> 00:55:43,250
well I actually remember one of the

1359
00:55:46,990 --> 00:55:45,500
first I was so into this when I was

1360
00:55:48,700 --> 00:55:47,000
young I add up there's a great book

1361
00:55:50,680 --> 00:55:48,710
called alien not over the antipathy

1362
00:55:51,730 --> 00:55:50,690
aliens over the Antipodes which went

1363
00:55:53,770 --> 00:55:51,740

into detail about frederick valentich

1364

00:55:55,390 --> 00:55:53,780

and so i was very excited when the

1365

00:55:57,130 --> 00:55:55,400

skeptic actually covered that story a

1366

00:55:58,930 --> 00:55:57,140

few years ago cuz i fascinate about that

1367

00:56:01,060 --> 00:55:58,940

when i was he was circling a large

1368

00:56:02,050 --> 00:56:01,070

object above him and the last thing we

1369

00:56:04,480 --> 00:56:02,060

heard from him with some sort of

1370

00:56:07,360 --> 00:56:04,490

metallic Clank as if he'd ran into it or

1371

00:56:09,850 --> 00:56:07,370

something I've yes well I think I I mean

1372

00:56:11,320 --> 00:56:09,860

yeah it fascinated me and I can remember

1373

00:56:12,610 --> 00:56:11,330

sort of squinting at airplanes

1374

00:56:14,140 --> 00:56:12,620

approaching Sydney Airport trying to

1375

00:56:16,150 --> 00:56:14,150

pretend that there were UFOs and making

1376

00:56:18,850 --> 00:56:16,160

paper models of them and you know this

1377

00:56:21,850 --> 00:56:18,860

is a UFO that I saw you know in inverted

1378

00:56:24,430 --> 00:56:21,860

commas so I can remember I do think it's

1379

00:56:25,600 --> 00:56:24,440

a gateway to skepticism because around

1380

00:56:29,200 --> 00:56:25,610

the same time I started reading I

1381

00:56:32,470 --> 00:56:29,210

remember the the book that was done by

1382

00:56:33,820 --> 00:56:32,480

Randy and and Dick Smith on the water

1383

00:56:35,230 --> 00:56:33,830

divining in Australia and I remember

1384

00:56:37,150 --> 00:56:35,240

that was in the school library so I'm

1385

00:56:38,530 --> 00:56:37,160

very thankful to the librarian at that

1386

00:56:40,150 --> 00:56:38,540

school for having that in the library

1387

00:56:42,070 --> 00:56:40,160

because that was a sort of a very early

1388

00:56:45,070 --> 00:56:42,080

start and you have a hell of an overdue

1389

00:56:49,000 --> 00:56:45,080

fee on that too I did give that one back

1390

00:56:50,530 --> 00:56:49,010

oh and of course I'm over near the

1391

00:56:53,920 --> 00:56:50,540

speaker let's just get down to some of

1392

00:56:58,340 --> 00:56:56,030

sure it's great but it's no Belinda

1393

00:57:00,590 --> 00:56:58,350

Carlisle people is it really who we got

1394

00:57:02,180 --> 00:57:00,600

here I may not I'm Nick I Nick pleased

1395

00:57:04,190 --> 00:57:02,190

to see you again tell us do you think

1396

00:57:05,930 --> 00:57:04,200

skeptic should still be interested in

1397

00:57:08,570 --> 00:57:05,940

the UFO phenomenon or it's something

1398

00:57:11,210 --> 00:57:08,580

that's headed today well UFOs there's

1399

00:57:14,360 --> 00:57:11,220

been the ancient alien astronaut

1400

00:57:15,980 --> 00:57:14,370

proponents oh yeah I love it when they

1401
00:57:17,480 --> 00:57:15,990
cut to Erich von Daniken and he's there

1402
00:57:20,660 --> 00:57:17,490
with the glass of scotch and the gold

1403
00:57:23,780 --> 00:57:20,670
ring that's fantastic i'm a Daniken fan

1404
00:57:27,200 --> 00:57:23,790
well you've got to have some someone to

1405
00:57:29,480 --> 00:57:27,210
criticize some target to pick on hmm you

1406
00:57:31,280 --> 00:57:29,490
know the crazy theories that every

1407
00:57:34,640 --> 00:57:31,290
single pyramid is pointing up towards

1408
00:57:37,400 --> 00:57:34,650
ancient UFOs and in other words your

1409
00:57:38,960 --> 00:57:37,410
favorite area of skepticism normally are

1410
00:57:40,970 --> 00:57:38,970
probably medicine I think that's one of

1411
00:57:42,110 --> 00:57:40,980
the big areas where people you know

1412
00:57:44,750 --> 00:57:42,120
right now there's this issue with a

1413
00:57:46,340 --> 00:57:44,760

measles outbreak and there's just it's

1414

00:57:48,560 --> 00:57:46,350

been going on for years that there's

1415

00:57:51,380 --> 00:57:48,570

been so much misinformation that we're

1416

00:57:53,810 --> 00:57:51,390

starting to finally see the real cause

1417

00:57:55,610 --> 00:57:53,820

have wanted the ultimate result with

1418

00:57:58,250 --> 00:57:55,620

real disease going around it's such a

1419

00:58:00,800 --> 00:57:58,260

big issue right now and also who we got

1420

00:58:03,260 --> 00:58:00,810

here Chris hello Chris are you a long

1421

00:58:04,130 --> 00:58:03,270

time skeptic medium time skeptical you

1422

00:58:07,010 --> 00:58:04,140

the guy who started the organization

1423

00:58:10,460 --> 00:58:07,020

with Dick Smith I've been a skeptic for

1424

00:58:13,430 --> 00:58:10,470

60-odd years hmm but I've actually been

1425

00:58:15,500 --> 00:58:13,440

associated with if you like the movement

1426
00:58:19,060 --> 00:58:15,510
for a few years coming to skeptic in the

1427
00:58:22,010 --> 00:58:19,070
pub at my entree was listening to

1428
00:58:24,800 --> 00:58:22,020
Richard and dr. ratio and skeptics ohm

1429
00:58:26,090 --> 00:58:24,810
and very early on in the piece what are

1430
00:58:27,710 --> 00:58:26,100
you making the show there's been three

1431
00:58:29,060 --> 00:58:27,720
hundred episodes is there something

1432
00:58:30,560 --> 00:58:29,070
that's stuck out in your mind or you gon

1433
00:58:34,000 --> 00:58:30,570
are these guys should lift their game

1434
00:58:39,530 --> 00:58:34,010
the NAS girls they used to be

1435
00:58:42,290 --> 00:58:39,540
no I to the line skeptic there are a

1436
00:58:44,750 --> 00:58:42,300
light in the darkness and sin to know

1437
00:58:46,490 --> 00:58:44,760
that there's people like you as we saw

1438
00:58:49,430 --> 00:58:46,500

when we had ten Australia or the

1439

00:58:51,200 --> 00:58:49,440

conference down in Melbourne exactly

1440

00:58:54,319 --> 00:58:51,210

it's nice to know and that's why I come

1441

00:58:57,319 --> 00:58:54,329

to skeptics in the pub one of the big

1442

00:59:00,020 --> 00:58:57,329

issues if you look at one of the great

1443

00:59:02,089 --> 00:59:00,030

if you like strengths and values of

1444

00:59:06,290 --> 00:59:02,099

religion is is a sense of community

1445

00:59:08,390 --> 00:59:06,300

fellowship this is my my wife goes to

1446

00:59:11,030 --> 00:59:08,400

church every week I've come to skeptics

1447

00:59:12,349 --> 00:59:11,040

in the pub every month and now you've

1448

00:59:15,500 --> 00:59:12,359

got me in addition we don't have to

1449

00:59:18,140 --> 00:59:15,510

dress up as much here either really well

1450

00:59:21,349 --> 00:59:18,150

being Catholic then undress out I have

1451

00:59:24,020 --> 00:59:21,359

fantastic hats and my wife doesn't wear

1452

00:59:25,910 --> 00:59:24,030

one I hope does the Pope's got the

1453

00:59:27,049 --> 00:59:25,920

benefit like like you know I mean you

1454

00:59:28,490 --> 00:59:27,059

know when he flies on the back of

1455

00:59:32,809 --> 00:59:28,500

powdered toast man that's some of the

1456

00:59:35,720 --> 00:59:32,819

best bits of ren and stimpie yeah I'd

1457

00:59:38,510 --> 00:59:35,730

love the popemobile back man would love

1458

00:59:40,400 --> 00:59:38,520

the popemobile look Adam West the true

1459

00:59:42,799 --> 00:59:40,410

Batman as a believer Adam West is the

1460

00:59:44,120 --> 00:59:42,809

one and only true Batman and the UFO

1461

00:59:45,770 --> 00:59:44,130

issue how do you feel about it because

1462

00:59:49,190 --> 00:59:45,780

early on in skepticism that would have

1463

00:59:51,710 --> 00:59:49,200

been one of the main ones yeah I I see

1464

00:59:55,940 --> 00:59:51,720

UFOs as being in there with all the

1465

00:59:58,160 --> 00:59:55,950

other conspiracy theories people will

1466

01:00:00,650 --> 00:59:58,170

look the more you prove that they don't

1467

01:00:04,190 --> 01:00:00,660

exist the more they believe that they

1468

01:00:07,040 --> 01:00:04,200

exist you reinforce this ends a

1469

01:00:10,220 --> 01:00:07,050

conspiracy but I think

1470

01:00:15,760 --> 01:00:10,230

I'll agree with our friend here that the

1471

01:00:18,890 --> 01:00:15,770

medical issues particularly the

1472

01:00:20,450 --> 01:00:18,900

anti-vaxxers to put it frankly they have

1473

01:00:23,240 --> 01:00:20,460

blood on their hands this is a

1474

01:00:25,750 --> 01:00:23,250

conspiracy theory that kills babies and

1475

01:00:29,870 --> 01:00:25,760

as a grandfather I find that absolutely

1476

01:00:31,310 --> 01:00:29,880

abhorrent have you had to step in if you

1477

01:00:32,930 --> 01:00:31,320

don't mind me asking on the personal

1478

01:00:37,970 --> 01:00:32,940

family level with this argument at all

1479

01:00:41,810 --> 01:00:37,980

or not absolutely not but my I've had my

1480

01:00:45,740 --> 01:00:41,820

wife at a school was approached by one

1481

01:00:47,390 --> 01:00:45,750

of the teachers on the young teachers

1482

01:00:51,760 --> 01:00:47,400

with her baby should i have the baby

1483

01:00:57,440 --> 01:00:51,770

immunized and i was able to give a few

1484

01:00:59,810 --> 01:00:57,450

websites having spoken to my Frank hero

1485

01:01:03,230 --> 01:00:59,820

or heroine I mean your dad say heroin

1486

01:01:06,530 --> 01:01:03,240

dr. Rashi and suggested that they look

1487

01:01:08,480 --> 01:01:06,540

up immunization rather than vaccination

1488

01:01:11,720 --> 01:01:08,490

and and you start looking at some

1489

01:01:14,240 --> 01:01:11,730

scientifically-based factual websites

1490

01:01:16,460 --> 01:01:14,250

and thankfully they had their child

1491

01:01:18,230 --> 01:01:16,470

backs neighbor you certainly stood up

1492

01:01:20,120 --> 01:01:18,240

the chapter you had your skeptical chops

1493

01:01:21,560 --> 01:01:20,130

going on then is there a website that

1494

01:01:22,910 --> 01:01:21,570

you've got or one that you think's good

1495

01:01:24,500 --> 01:01:22,920

that people should visit for science

1496

01:01:26,540 --> 01:01:24,510

you'd like to recommend to us well it's

1497

01:01:28,850 --> 01:01:26,550

not for science but I have a business am

1498

01:01:29,930 --> 01:01:28,860

I allowed to say my website look look if

1499

01:01:31,130 --> 01:01:29,940

we've got an issue with what you've been

1500

01:01:35,990 --> 01:01:31,140

saying yeah that's probably where we

1501
01:01:37,760 --> 01:01:36,000
should go Christian's com delay you well

1502
01:01:39,530 --> 01:01:37,770
look at last interview now spoken about

1503
01:01:40,880 --> 01:01:39,540
almost all the 70 people that were here

1504
01:01:43,040 --> 01:01:40,890
Tim do you think we should still bother

1505
01:01:45,140 --> 01:01:43,050
with UFOs bearing in mind that they are

1506
01:01:47,570 --> 01:01:45,150
real and erich von daniken is real as

1507
01:01:49,670 --> 01:01:47,580
well absolutely I've travelled in some

1508
01:01:51,050 --> 01:01:49,680
myself actually it was when you got

1509
01:01:52,760 --> 01:01:51,060
involved with the skeptical of spoke

1510
01:01:54,710 --> 01:01:52,770
workers and people with who've been in

1511
01:01:56,780 --> 01:01:54,720
the skeptical moon for quite a long time

1512
01:01:58,310 --> 01:01:56,790
that would have been one of the initial

1513
01:02:00,320 --> 01:01:58,320

issues you guys would have dealt with

1514

01:02:02,570 --> 01:02:00,330

yeah it was most definitely I think we

1515

01:02:05,090 --> 01:02:02,580

dealt with the the key issues that are

1516

01:02:06,890 --> 01:02:05,100

sort of troubling the world now UFOs

1517

01:02:08,510 --> 01:02:06,900

Bigfoot and Loch Ness monsters and

1518

01:02:10,400 --> 01:02:08,520

should we still bother with that should

1519

01:02:12,860 --> 01:02:10,410

skeptics to bother with that I say we

1520

01:02:14,480 --> 01:02:12,870

when you know you know you know you know

1521

01:02:16,400 --> 01:02:14,490

i love it Jen aliens you know i'm

1522

01:02:20,510 --> 01:02:16,410

watching the secret UFO history

1523

01:02:22,310 --> 01:02:20,520

mate I i I'm a loch ness monster fancier

1524

01:02:25,100 --> 01:02:22,320

I've been good luck that's about three

1525

01:02:26,600 --> 01:02:25,110

times I look and as people say if there

1526
01:02:28,820 --> 01:02:26,610
isn't a monster in there there should be

1527
01:02:30,560 --> 01:02:28,830
should be yes absolutely I've been to

1528
01:02:32,780 --> 01:02:30,570
the museum the museum's changed over the

1529
01:02:35,000 --> 01:02:32,790
years it started off as a really cool

1530
01:02:36,830 --> 01:02:35,010
little cottage which firmly believed in

1531
01:02:38,000 --> 01:02:36,840
Loch Ness monster it developed into a

1532
01:02:38,960 --> 01:02:38,010
bigger building and the bigger building

1533
01:02:41,230 --> 01:02:38,970
each time we got more some more

1534
01:02:43,340 --> 01:02:41,240
scientific and less interesting

1535
01:02:45,350 --> 01:02:43,350
obviously I bring back the Loch Ness

1536
01:02:46,550 --> 01:02:45,360
monster I say the only sign of the Loch

1537
01:02:49,070 --> 01:02:46,560
Ness monster I've seen in my business

1538
01:02:51,320 --> 01:02:49,080

there was a roadside Caravan selling

1539

01:03:03,599 --> 01:02:51,330

monster burgers but worried with worried

1540

01:03:12,829 --> 01:03:07,079

everyone this is trent brusky creator of

1541

01:03:19,229 --> 01:03:15,989

Dropbox is a project that's dedicated to

1542

01:03:22,049 --> 01:03:19,239

supporting skeptical secular and science

1543

01:03:24,539 --> 01:03:22,059

podcasts or new tumors by creating

1544

01:03:27,179 --> 01:03:24,549

different music for their shows you can

1545

01:03:29,549 --> 01:03:27,189

hear me on such shows as skeptic ality

1546

01:03:31,829 --> 01:03:29,559

augments by Jeff wagon his college of

1547

01:03:34,049 --> 01:03:31,839

curiosity and dog will be paid along

1548

01:03:37,640 --> 01:03:34,059

with a few other great shows if you are

1549

01:03:42,380 --> 01:03:37,650

in need of any music please go to ww

1550

01:03:59,589 --> 01:03:42,390

Dropbox sound o RG also facebook.com

1551

01:04:04,490 --> 01:04:02,150

thank you for listening to the skeptic

1552

01:04:06,680 --> 01:04:04,500

zone I must say in the past week a

1553

01:04:08,990 --> 01:04:06,690

couple of days ago dr. H E and myself

1554

01:04:12,109 --> 01:04:09,000

performed our mystery investigators show

1555

01:04:13,940 --> 01:04:12,119

at a police school here in Sydney wow

1556

01:04:16,550 --> 01:04:13,950

what a great time we had and it struck

1557

01:04:19,910 --> 01:04:16,560

me when I was getting ready for the show

1558

01:04:21,800 --> 01:04:19,920

that that's the ninth year in a row the

1559

01:04:26,390 --> 01:04:21,810

mystery investigators have performed at

1560

01:04:28,400 --> 01:04:26,400

Abbot's Leigh and this year 2013 mux are

1561

01:04:31,730 --> 01:04:28,410

the 10th anniversary of doing mystery

1562

01:04:33,589 --> 01:04:31,740

investigators Wow I get we must have we

1563

01:04:35,150 --> 01:04:33,599

must have given our demonstration talk

1564

01:04:38,660 --> 01:04:35,160

now to hundreds and hundreds and

1565

01:04:40,970 --> 01:04:38,670

hundreds of children both here and we've

1566

01:04:42,650 --> 01:04:40,980

done that in New Zealand and in the

1567

01:04:45,560 --> 01:04:42,660

United States a couple of shows there

1568

01:04:48,589 --> 01:04:45,570

wow I can't believe it's been 10 years

1569

01:04:51,470 --> 01:04:48,599

that's the mystery investigators a show

1570

01:04:54,109 --> 01:04:51,480

we really love doing but for this week

1571

01:05:00,320 --> 01:04:54,119

this is Richard Saunders signing off

1572

01:05:03,620 --> 01:05:00,330

from Sydney Australia you've been

1573

01:05:08,120 --> 01:05:03,630

listening to the skeptic zone visit our

1574

01:05:10,609 --> 01:05:08,130

website at [www.skeptics on TV](http://www.skepticsontv.com) for