

# The Skeptic Zone

Show 242 - 8 June 2013



D.J. Grotte

1  
00:00:21,720 --> 00:00:09,089  
welcome to the skeptic zone the podcast

2  
00:00:29,820 --> 00:00:24,430  
hello and welcome to the skeptic zone

3  
00:00:32,830 --> 00:00:29,830  
episode number 242 for the eighth of jun

4  
00:00:35,200 --> 00:00:32,840  
2013 Richard Saunders here with you from

5  
00:00:36,850 --> 00:00:35,210  
Sydney Australia coming up on this

6  
00:00:39,250 --> 00:00:36,860  
week's show we're going to kick off with

7  
00:00:42,070 --> 00:00:39,260  
an interview with a very dear friend of

8  
00:00:45,640 --> 00:00:42,080  
mine DJ Grothe the president of the

9  
00:00:48,930 --> 00:00:45,650  
James Randi Educational Foundation DJ's

10  
00:00:54,040 --> 00:00:48,940  
here to tell us more about the upcoming

11  
00:00:57,100 --> 00:00:54,050  
amazing meeting tam-tam 2013 in Las

12  
00:00:58,840 --> 00:00:57,110  
Vegas certainly a highlight a highlight

13  
00:01:00,850 --> 00:00:58,850

of the skeptical calendar and a

14

00:01:02,380 --> 00:01:00,860

highlight of my year I always look

15

00:01:04,299 --> 00:01:02,390

forward to the amazing meeting I get the

16

00:01:06,000 --> 00:01:04,309

chance to meet many many skeptics own

17

00:01:10,720 --> 00:01:06,010

listeners which is always a treat and

18

00:01:11,950 --> 00:01:10,730

also well we'll find out more with the

19

00:01:14,320 --> 00:01:11,960

interview coming up at the top of the

20

00:01:17,260 --> 00:01:14,330

show with DJ Grothe and following that

21

00:01:20,200 --> 00:01:17,270

it's dr. Richie reports now a couple of

22

00:01:23,020 --> 00:01:20,210

weeks ago dr. Richie was on ABC radio

23

00:01:26,230 --> 00:01:23,030

and we thank the ABC very much for the

24

00:01:30,760 --> 00:01:26,240

audio dr. H he was interviewed and took

25

00:01:33,249 --> 00:01:30,770

some more call in questions that's dr. H

26

00:01:35,740 --> 00:01:33,259

E on the radio coming up a bit later in

27

00:01:37,660 --> 00:01:35,750

the show and then it's a week in science

28

00:01:43,480 --> 00:01:37,670

from the Royal Institution of Australia

29

00:01:45,819 --> 00:01:43,490

www RI aus org dot a you with the

30

00:01:49,359 --> 00:01:45,829

delightful Tonya Meyer because Paul

31

00:01:52,719 --> 00:01:49,369

Willis poor Willis it was out of town in

32

00:01:55,300 --> 00:01:52,729

fact he was in this town so after a week

33

00:01:57,670 --> 00:01:55,310

in science its Maynard spooky action

34

00:01:59,859 --> 00:01:57,680

Maynard the pub the other night here in

35

00:02:02,289 --> 00:01:59,869

Sydney where he interviews none other

36

00:02:04,740 --> 00:02:02,299

than dr. Paul Willis and dr. Paul Willis

37

00:02:06,969 --> 00:02:04,750

will tell us more about his interesting

38

00:02:10,810 --> 00:02:06,979

encounters with the creationists and

39

00:02:13,360 --> 00:02:10,820

some breaking news from China regarding

40

00:02:16,090 --> 00:02:13,370

dinosaurs and after that main our chats

41

00:02:19,270 --> 00:02:16,100

to various pub goers and ask the big

42

00:02:21,670 --> 00:02:19,280

question when should skeptics stop

43

00:02:23,680 --> 00:02:21,680

investigating something hmm that's

44

00:02:25,630 --> 00:02:23,690

coming up to round off the show don't

45

00:02:29,830 --> 00:02:25,640

forget you can follow the skeptic zone

46

00:02:32,770 --> 00:02:29,840

on twitter at skeptic zone very easy to

47

00:02:34,680 --> 00:02:32,780

remember but now it's time for me to run

48

00:02:40,809 --> 00:02:34,690

downstairs

49

00:02:45,309 --> 00:02:40,819

mmm sourdough bread posted then some

50

00:02:49,570 --> 00:02:45,319

smoked salmon on top of that spreading

51  
00:02:54,059 --> 00:02:49,580  
avocado on top of that and rounding that

52  
00:02:58,140 --> 00:02:54,069  
off with some quince jam or quince jelly

53  
00:03:00,789 --> 00:02:58,150  
whoa right yes I think I were to do that

54  
00:03:21,780 --> 00:03:00,799  
while I'm doing that I hope you enjoy

55  
00:03:28,150 --> 00:03:25,330  
and joining me on the line now it's none

56  
00:03:29,770 --> 00:03:28,160  
other than DJ Grothe hello DJ well hello

57  
00:03:32,500 --> 00:03:29,780  
Richard good to be on the show again

58  
00:03:35,710 --> 00:03:32,510  
chat with you how have you been I I take

59  
00:03:38,350 --> 00:03:35,720  
it you keep yourself busy as all but

60  
00:03:41,230 --> 00:03:38,360  
insanely busy skeptics do and you're one

61  
00:03:44,500 --> 00:03:41,240  
of the busiest I tried DJ I try as you

62  
00:03:47,470 --> 00:03:44,510  
know I really love outreach and that's

63  
00:03:50,590 --> 00:03:47,480

what I love to talk to people and

64

00:03:53,260 --> 00:03:50,600

demonstrate things and hopefully

65

00:03:55,630 --> 00:03:53,270

hopefully sway people to our way of

66

00:03:57,580 --> 00:03:55,640

thinking which is a good segue we might

67

00:03:59,560 --> 00:03:57,590

say because that's exactly what I'll be

68

00:04:02,860 --> 00:03:59,570

doing and many other people including

69

00:04:06,400 --> 00:04:02,870

yourself at the upcoming amazing meeting

70

00:04:07,840 --> 00:04:06,410

tam Las Vegas coming around again right

71

00:04:10,900 --> 00:04:07,850

we're very excited about this upcoming

72

00:04:12,340 --> 00:04:10,910

event it's in july july eleventh for

73

00:04:14,740 --> 00:04:12,350

fourteenth and we think this is the

74

00:04:16,210 --> 00:04:14,750

biggest best amazing meeting we've ever

75

00:04:17,740 --> 00:04:16,220

put on you know that we've done them

76  
00:04:21,070 --> 00:04:17,750  
around the world we've done a couple in

77  
00:04:24,370 --> 00:04:21,080  
the UK we did tam australia we've

78  
00:04:26,469 --> 00:04:24,380  
supported the australian skeptics

79  
00:04:28,810 --> 00:04:26,479  
conference and eventually all around the

80  
00:04:31,810 --> 00:04:28,820  
world but the big kahuna for us is the

81  
00:04:34,510 --> 00:04:31,820  
amazing meeting in vegas and its really

82  
00:04:36,490 --> 00:04:34,520  
the largest event of its kind in the

83  
00:04:39,190 --> 00:04:36,500  
world we have well over a thousand folks

84  
00:04:44,050 --> 00:04:39,200  
come for four full days of programming

85  
00:04:47,740 --> 00:04:44,060  
in vegas in july so there are workshops

86  
00:04:50,200 --> 00:04:47,750  
and panel discussions over 75 different

87  
00:04:54,030 --> 00:04:50,210  
presenters their evening shows late

88  
00:04:57,190 --> 00:04:54,040

night late night events there are

89

00:04:59,080 --> 00:04:57,200

parties and there's a live

90

00:05:01,270 --> 00:04:59,090

million-dollar challenge there's in

91

00:05:04,090 --> 00:05:01,280

other words there's just a lot going on

92

00:05:07,570 --> 00:05:04,100

we sort of think of it as a four-day

93

00:05:09,550 --> 00:05:07,580

vacation from unreason and folks show up

94

00:05:11,200 --> 00:05:09,560

and get involved in all the ways that i

95

00:05:12,820 --> 00:05:11,210

just mentioned you'll be there again

96

00:05:15,370 --> 00:05:12,830

this year you're on the program you're

97

00:05:17,469 --> 00:05:15,380

contributing to the great conversation

98

00:05:19,330 --> 00:05:17,479

of skepticism we have going on and we

99

00:05:23,110 --> 00:05:19,340

have just really some of the leading

100

00:05:25,900 --> 00:05:23,120

lights of the day plugged in and as

101  
00:05:28,270 --> 00:05:25,910  
part of the event this year were again

102  
00:05:31,240 --> 00:05:28,280  
really excited people often ask me why I

103  
00:05:33,129 --> 00:05:31,250  
keep going to these events I tried to go

104  
00:05:35,439 --> 00:05:33,139  
to them around the world if when I'm

105  
00:05:36,879 --> 00:05:35,449  
lucky enough to be able to do it and one

106  
00:05:38,500 --> 00:05:36,889  
of the I guess there are several reasons

107  
00:05:40,510 --> 00:05:38,510  
but if certainly one of the major

108  
00:05:44,740 --> 00:05:40,520  
reasons I go is to sit in the audience

109  
00:05:45,939 --> 00:05:44,750  
and learn from the wonderful speakers

110  
00:05:48,189 --> 00:05:45,949  
that come along to conventions

111  
00:05:50,379 --> 00:05:48,199  
especially like the ones at tam because

112  
00:05:52,570 --> 00:05:50,389  
as you know skepticism and what we do is

113  
00:05:54,820 --> 00:05:52,580

an ongoing learning process and what

114

00:05:58,090 --> 00:05:54,830

better way than to hear from these

115

00:06:00,340 --> 00:05:58,100

people themselves exactly so that is a

116

00:06:02,110 --> 00:06:00,350

big component of Tam it's sort of like I

117

00:06:06,430 --> 00:06:02,120

think your listeners will be familiar

118

00:06:08,830 --> 00:06:06,440

with ted talks right Ted well this is in

119

00:06:10,689 --> 00:06:08,840

a sense sort of a Ted of skepticism we

120

00:06:12,550 --> 00:06:10,699

have a lot of presenters giving you know

121

00:06:15,760 --> 00:06:12,560

their half an hour talks on that their

122

00:06:17,590 --> 00:06:15,770

areas of expertise this year we have the

123

00:06:20,260 --> 00:06:17,600

really leading figure in the history

124

00:06:21,939 --> 00:06:20,270

skepticism Susan Blackmore is speaking

125

00:06:24,430 --> 00:06:21,949

the evolutionary biologist and

126  
00:06:27,279 --> 00:06:24,440  
best-selling author Jerry Coyne the

127  
00:06:29,290 --> 00:06:27,289  
great this some people sort of call him

128  
00:06:31,930 --> 00:06:29,300  
the James Randi of India so now at a

129  
00:06:35,170 --> 00:06:31,940  
Morocco is speaking Susan Hawk the

130  
00:06:38,760 --> 00:06:35,180  
philosopher the sexologist and skeptic

131  
00:06:41,110 --> 00:06:38,770  
mar decline michael e man the

132  
00:06:43,750 --> 00:06:41,120  
climatologist and the climate scientists

133  
00:06:46,719 --> 00:06:43,760  
who does a lot of work about denialism

134  
00:06:48,640 --> 00:06:46,729  
of global warming and and skepticism of

135  
00:06:52,629 --> 00:06:48,650  
the pseudoscience involved around that

136  
00:06:54,580 --> 00:06:52,639  
denialism and then a lot of our old

137  
00:06:57,010 --> 00:06:54,590  
favorites right so Penn Jillette and

138  
00:07:00,580 --> 00:06:57,020

Michael Shermer and Jamie and Swiss

139

00:07:03,400 --> 00:07:00,590

Steve novella a lot of people are part

140

00:07:05,830 --> 00:07:03,410

of the program so what you just

141

00:07:08,890 --> 00:07:05,840

mentioned is significant it's this

142

00:07:10,240 --> 00:07:08,900

learning opportunity but at the amazing

143

00:07:13,750 --> 00:07:10,250

meeting it's more than that it's

144

00:07:16,629 --> 00:07:13,760

participatory we have 10 workshops at

145

00:07:18,550 --> 00:07:16,639

the amazing meeting this year these are

146

00:07:20,170 --> 00:07:18,560

hands-on opportunities for people to

147

00:07:22,450 --> 00:07:20,180

really roll up their sleeves and learn

148

00:07:25,900 --> 00:07:22,460

how to take can I put it this way take

149

00:07:29,020 --> 00:07:25,910

their this skepticism back to their own

150

00:07:30,310 --> 00:07:29,030

neck of the woods and as I say roll up

151

00:07:33,240 --> 00:07:30,320

their sleeves get their hands dirty

152

00:07:36,180 --> 00:07:33,250

advancing skepticism at the local level

153

00:07:38,220 --> 00:07:36,190

we have the panel disc

154

00:07:39,690 --> 00:07:38,230

missions and sort of debates and we

155

00:07:41,040 --> 00:07:39,700

don't really frame them as debates it's

156

00:07:44,130 --> 00:07:41,050

not going to be knocked down drag out

157

00:07:45,780 --> 00:07:44,140

but in other words there's a diversity

158

00:07:48,720 --> 00:07:45,790

of viewpoints presented and people

159

00:07:50,880 --> 00:07:48,730

really get to engage on these issues so

160

00:07:52,800 --> 00:07:50,890

there's really a lot going on and as you

161

00:07:56,600 --> 00:07:52,810

know from last year in previous tams

162

00:08:01,110 --> 00:07:56,610

what we also really like to do is engage

163

00:08:03,690 --> 00:08:01,120

i'll use the term cultural competitors

164

00:08:05,610 --> 00:08:03,700

so last year at the amazing meeting we

165

00:08:08,550 --> 00:08:05,620

actually tested a paranormal claim

166

00:08:10,950 --> 00:08:08,560

claimant live on stage it's one of the

167

00:08:13,110 --> 00:08:10,960

most popular videos from last year's

168

00:08:16,080 --> 00:08:13,120

amazing meeting you could share a link

169

00:08:19,410 --> 00:08:16,090

with your listeners where we went

170

00:08:21,540 --> 00:08:19,420

through an exhaustive and very odd from

171

00:08:22,950 --> 00:08:21,550

my vantage sort of tedious but we cared

172

00:08:26,220 --> 00:08:22,960

about the issue enough we went through

173

00:08:29,460 --> 00:08:26,230

that process to test the claim of a sort

174

00:08:31,710 --> 00:08:29,470

of power balance band it was a went by

175

00:08:35,100 --> 00:08:31,720

another name but you were involved in

176

00:08:37,980 --> 00:08:35,110

that process and the claimant I was

177

00:08:39,630 --> 00:08:37,990

proud to say the claimant was happy with

178

00:08:41,610 --> 00:08:39,640

our approach so we weren't the post

179

00:08:43,409 --> 00:08:41,620

naysaying debunkers who reject claims

180

00:08:46,140 --> 00:08:43,419

out of hand we take the stuff seriously

181

00:08:48,000 --> 00:08:46,150

and even when we're dealing with folks

182

00:08:50,460 --> 00:08:48,010

who believe things for which we think

183

00:08:53,700 --> 00:08:50,470

there's inadequate evidence we do it

184

00:08:56,160 --> 00:08:53,710

respectfully we engage with them with

185

00:08:58,320 --> 00:08:56,170

civility because these questions are

186

00:09:01,770 --> 00:08:58,330

important and were not those sorts of

187

00:09:04,620 --> 00:09:01,780

naysayers who misunderstand skepticism

188

00:09:07,140 --> 00:09:04,630

to be just saying no to others beliefs

189

00:09:08,820 --> 00:09:07,150

instead skepticism at the amazing

190

00:09:10,920 --> 00:09:08,830

meeting and skepticism for the James

191

00:09:13,470 --> 00:09:10,930

Randi Educational Foundation is an

192

00:09:15,630 --> 00:09:13,480

open-minded inquiry that looks into

193

00:09:18,420 --> 00:09:15,640

these important claims really with an

194

00:09:21,480 --> 00:09:18,430

aim to help people guard themselves from

195

00:09:22,829 --> 00:09:21,490

nonsense or harmful beliefs especially

196

00:09:26,579 --> 00:09:22,839

the paranormal or super scientific

197

00:09:28,500 --> 00:09:26,589

variety yes these live challenges a huge

198

00:09:31,800 --> 00:09:28,510

highlight of the amazing meeting because

199

00:09:34,230 --> 00:09:31,810

people often hear about skeptics like

200

00:09:36,990 --> 00:09:34,240

you and myself and other organizations

201  
00:09:38,670 --> 00:09:37,000  
around the world testing or challenging

202  
00:09:41,190 --> 00:09:38,680  
these people with vast sums of money

203  
00:09:45,329 --> 00:09:41,200  
involved but to actually see one in

204  
00:09:47,850 --> 00:09:45,339  
progress it's it's quite a spellbinding

205  
00:09:50,040 --> 00:09:47,860  
even though I i agree last year's one

206  
00:09:51,690 --> 00:09:50,050  
was a lengthy and meticulous but that's

207  
00:09:55,920 --> 00:09:51,700  
certainly necessary in part of the

208  
00:09:58,259 --> 00:09:55,930  
process right and your listeners can see

209  
00:10:01,199 --> 00:09:58,269  
what tams all about including that video

210  
00:10:04,620 --> 00:10:01,209  
and see how popular was it sort of went

211  
00:10:06,090 --> 00:10:04,630  
viral online on our popular video

212  
00:10:07,889 --> 00:10:06,100  
channel one of the most subscribed

213  
00:10:10,949 --> 00:10:07,899

nonprofit channels in youtube history

214

00:10:15,000 --> 00:10:10,959

we're told by YouTube it's found at

215

00:10:17,579 --> 00:10:15,010

youtube.com slash James Randi foundation

216

00:10:20,519 --> 00:10:17,589

and you'll see that live challenge there

217

00:10:22,500 --> 00:10:20,529

you could also see examples of other

218

00:10:25,949 --> 00:10:22,510

challenges and other presentations we've

219

00:10:28,350 --> 00:10:25,959

made talks on these various issues so

220

00:10:31,079 --> 00:10:28,360

there's a lot there's a lot going on and

221

00:10:32,850 --> 00:10:31,089

as I say it's the largest event of its

222

00:10:35,069 --> 00:10:32,860

kind in the world on scientific

223

00:10:36,810 --> 00:10:35,079

skepticism other other big conferences

224

00:10:38,400 --> 00:10:36,820

you go to tech conferences you're gonna

225

00:10:40,560 --> 00:10:38,410

I don't know if you're an atheist you

226

00:10:43,259 --> 00:10:40,570

good atheist conferences you go to all

227

00:10:45,480 --> 00:10:43,269

sorts of other kinds of events but this

228

00:10:48,660 --> 00:10:45,490

is the conference for scientific

229

00:10:50,280 --> 00:10:48,670

skepticism advancing the mission of the

230

00:10:52,560 --> 00:10:50,290

James Randi Educational Foundation the

231

00:10:55,190 --> 00:10:52,570

stuff that sort of cocoa here's this

232

00:10:57,780 --> 00:10:55,200

growing worldwide skeptics movement and

233

00:11:00,210 --> 00:10:57,790

we couldn't be happier with the response

234

00:11:02,730 --> 00:11:00,220

and the enthusiasm surrounding this

235

00:11:04,710 --> 00:11:02,740

year's event well I was just having a

236

00:11:09,380 --> 00:11:04,720

quick look at the website itself which

237

00:11:11,790 --> 00:11:09,390

is of course wwm aging meeting calm and

238

00:11:13,590 --> 00:11:11,800

just the workshops which you are

239

00:11:16,910 --> 00:11:13,600

mentioning a little earlier alone looked

240

00:11:21,480 --> 00:11:16,920

like more than enough reason to go along

241

00:11:24,440 --> 00:11:21,490

10 workshops how your camera lies to you

242

00:11:26,360 --> 00:11:24,450

blogging about skeptical blogging

243

00:11:29,130 --> 00:11:26,370

skepticism across the curriculum

244

00:11:31,710 --> 00:11:29,140

crowdsourcing skepticism metaphysics and

245

00:11:33,600 --> 00:11:31,720

fraud it goes on and on and on I think

246

00:11:35,550 --> 00:11:33,610

it's an every year I noticed that these

247

00:11:37,310 --> 00:11:35,560

workshops are growing more important and

248

00:11:41,310 --> 00:11:37,320

you're certainly getting more of them

249

00:11:43,530 --> 00:11:41,320

right we think while the component of

250

00:11:47,790 --> 00:11:43,540

you know sitting with a thousand or so

251  
00:11:49,800 --> 00:11:47,800  
of your intellectual peers and listening

252  
00:11:52,500 --> 00:11:49,810  
to the leading lights of the day on

253  
00:11:55,740 --> 00:11:52,510  
stage we think that's important yes but

254  
00:11:58,410 --> 00:11:55,750  
we also think it's so vital for people

255  
00:12:01,230 --> 00:11:58,420  
to participate in the conversation these

256  
00:12:02,660 --> 00:12:01,240  
workshops are hands-on ways of sort of

257  
00:12:05,660 --> 00:12:02,670  
getting trained to

258  
00:12:07,910 --> 00:12:05,670  
work with us to advance this important

259  
00:12:11,990 --> 00:12:07,920  
point of view the skepticism a method of

260  
00:12:14,750 --> 00:12:12,000  
inquiry at the local level and so that's

261  
00:12:17,540 --> 00:12:14,760  
really what these workshops have

262  
00:12:21,770 --> 00:12:17,550  
developed into you know years ago we do

263  
00:12:25,480 --> 00:12:21,780

one or two and then they sort of grew a

264

00:12:28,550 --> 00:12:25,490

number and now it's we offer 10

265

00:12:31,010 --> 00:12:28,560

full-blown workshops and attendees can

266

00:12:33,830 --> 00:12:31,020

get a thing called the all workshop pass

267

00:12:36,200 --> 00:12:33,840

which entitles that into all ten

268

00:12:38,060 --> 00:12:36,210

workshops there concurrent so you you

269

00:12:39,620 --> 00:12:38,070

know it's unlikely you'd be able to go

270

00:12:42,920 --> 00:12:39,630

to all of them but the point is you have

271

00:12:45,440 --> 00:12:42,930

the choice of whether it's the how

272

00:12:47,420 --> 00:12:45,450

rational are you work shop or a workshop

273

00:12:49,430 --> 00:12:47,430

on how to get involved in preserving

274

00:12:51,560 --> 00:12:49,440

skeptic history there's the really

275

00:12:53,660 --> 00:12:51,570

popular science based medicine work shop

276

00:12:59,210 --> 00:12:53,670

run by Steve novella and his team of

277

00:13:01,340 --> 00:12:59,220

science and skepticism at all doctors or

278

00:13:03,830 --> 00:13:01,350

science base but you'll learn a defense

279

00:13:06,380 --> 00:13:03,840

like the amazing meeting not so I'm

280

00:13:09,350 --> 00:13:06,390

scientists Bush alternative

281

00:13:10,970 --> 00:13:09,360

complementary and alternative modalities

282

00:13:13,280 --> 00:13:10,980

and so there's a lot going on in that

283

00:13:16,070 --> 00:13:13,290

way one of the things that I get a kick

284

00:13:17,450 --> 00:13:16,080

out at tam and you know it's it's weird

285

00:13:19,490 --> 00:13:17,460

to emphasize one thing or another

286

00:13:21,950 --> 00:13:19,500

because there's so much going on this is

287

00:13:24,410 --> 00:13:21,960

the biggest event of its kind a lot of

288

00:13:27,110 --> 00:13:24,420

moving parts events going on from what

289

00:13:28,970 --> 00:13:27,120

8am till after midnight every day for

290

00:13:33,050 --> 00:13:28,980

four days in a row but something I

291

00:13:34,400 --> 00:13:33,060

really enjoy this shows the amazing

292

00:13:37,070 --> 00:13:34,410

meeting unlike really any other

293

00:13:40,370 --> 00:13:37,080

conference out there we do really high

294

00:13:42,550 --> 00:13:40,380

quality high production value events in

295

00:13:46,580 --> 00:13:42,560

the evenings these are ticketed items of

296

00:13:51,050 --> 00:13:46,590

performances so this year we're doing

297

00:13:54,340 --> 00:13:51,060

like a magic and mentalism show and also

298

00:13:57,320 --> 00:13:54,350

some sideshow stunts and and

299

00:14:00,530 --> 00:13:57,330

performances featuring that's john

300

00:14:02,750 --> 00:14:00,540

armstrong and the Krystyn Lambert and

301  
00:14:05,750 --> 00:14:02,760  
some mentalism with Johnny savant and

302  
00:14:07,730 --> 00:14:05,760  
Carolyn Gayle Jamy Ian Swiss would be

303  
00:14:11,380 --> 00:14:07,740  
known to your listeners he's on the

304  
00:14:14,630 --> 00:14:11,390  
program performing Todd Robbins the

305  
00:14:16,370 --> 00:14:14,640  
fantastic performer really jack of all

306  
00:14:20,810 --> 00:14:16,380  
trades sideshow performer but

307  
00:14:23,690 --> 00:14:20,820  
so does spooky presentations and was

308  
00:14:25,190 --> 00:14:23,700  
involved in tellers off-broadway show

309  
00:14:28,190 --> 00:14:25,200  
while both of them came together to do

310  
00:14:31,640 --> 00:14:28,200  
that play dead event he's coming back to

311  
00:14:33,740 --> 00:14:31,650  
town other evening events include this

312  
00:14:35,990 --> 00:14:33,750  
great concert that Penn Jillette has

313  
00:14:39,050 --> 00:14:36,000

been doing for us for the past few years

314

00:14:41,240 --> 00:14:39,060

his private rock and roll donut and

315

00:14:43,730 --> 00:14:41,250

bacon party oh that's a bad night that's

316

00:14:45,680 --> 00:14:43,740

always a big knobby knees right I you

317

00:14:48,260 --> 00:14:45,690

know for some folks I have to say that's

318

00:14:51,020 --> 00:14:48,270

in a sense the heart of Tam for some

319

00:14:53,450 --> 00:14:51,030

folks because that is the you know he he

320

00:14:55,760 --> 00:14:53,460

and his band are up there really singing

321

00:14:59,330 --> 00:14:55,770

love songs to Randy and for skepticism

322

00:15:02,570 --> 00:14:59,340

at this point of view and it's at the

323

00:15:04,880 --> 00:15:02,580

fellow feeling at that event you know

324

00:15:07,640 --> 00:15:04,890

it's one big happy family and it's just

325

00:15:11,750 --> 00:15:07,650

a beautiful beautiful time not to

326

00:15:14,870 --> 00:15:11,760

mention you get donuts and bacon and you

327

00:15:17,210 --> 00:15:14,880

know it's a celebration so there's a lot

328

00:15:20,750 --> 00:15:17,220

going on and and we really hope we see

329

00:15:22,340 --> 00:15:20,760

some of your listeners at the event any

330

00:15:24,650 --> 00:15:22,350

of your listeners who are interested in

331

00:15:27,290 --> 00:15:24,660

registering for Tam if they haven't

332

00:15:28,970 --> 00:15:27,300

already if they do it in the next 24

333

00:15:33,230 --> 00:15:28,980

hours there's still time to get this

334

00:15:36,410 --> 00:15:33,240

great Jay ref code with the hotel which

335

00:15:39,020 --> 00:15:36,420

makes the hotel rooms unbelievably

336

00:15:41,990 --> 00:15:39,030

affordable in fact when you factor all

337

00:15:44,360 --> 00:15:42,000

that in the amazing meeting is actually

338

00:15:47,630 --> 00:15:44,370

get this cheaper than any other

339

00:15:50,480 --> 00:15:47,640

conference of its kind when you factor

340

00:15:53,420 --> 00:15:50,490

in how inexpensive the hotel is right so

341

00:15:55,670 --> 00:15:53,430

it's a full four day event meals come

342

00:15:57,770 --> 00:15:55,680

with registration you'd think that'd be

343

00:15:59,600 --> 00:15:57,780

a super expensive event but because of

344

00:16:01,400 --> 00:15:59,610

the relationship we have with the hotel

345

00:16:04,580 --> 00:16:01,410

you know some of the hotel nights what

346

00:16:07,370 --> 00:16:04,590

it they could be as inexpensive as forty

347

00:16:10,580 --> 00:16:07,380

five dollars a night not 200 bucks or

348

00:16:12,860 --> 00:16:10,590

more like some other conferences so that

349

00:16:15,470 --> 00:16:12,870

code is still good for the next 24 hours

350

00:16:19,250 --> 00:16:15,480

you can get that at amazing meeting calm

351

00:16:21,440 --> 00:16:19,260

in addition there are discounts and

352

00:16:23,120 --> 00:16:21,450

other opportunities for people to get

353

00:16:26,300 --> 00:16:23,130

involved that they could find by going

354

00:16:27,650 --> 00:16:26,310

to your website or going to amazing

355

00:16:29,689 --> 00:16:27,660

leading calm there are a lot of grant

356

00:16:31,849 --> 00:16:29,699

opportunities tons

357

00:16:33,590 --> 00:16:31,859

folks actually get to come to the

358

00:16:36,409 --> 00:16:33,600

amazing meeting for free because of

359

00:16:39,769 --> 00:16:36,419

scholarship and grant opportunities for

360

00:16:42,019 --> 00:16:39,779

students and for members of Jarrett's

361

00:16:46,789 --> 00:16:42,029

online community and and that sort of

362

00:16:48,769 --> 00:16:46,799

thing so why merrier it sounds

363

00:16:50,960 --> 00:16:48,779

exhausting it sounds exhausting just

364

00:16:52,519 --> 00:16:50,970

just hearing about it let alone going to

365

00:16:54,769 --> 00:16:52,529

it and it is a veteran of many times

366

00:16:57,530 --> 00:16:54,779

myself I always come away completely

367

00:16:59,960 --> 00:16:57,540

exhausted but it completely exhilarated

368

00:17:01,429 --> 00:16:59,970

and and all the new things I learned and

369

00:17:03,530 --> 00:17:01,439

one of the things it pleases me very

370

00:17:05,720 --> 00:17:03,540

very much where I'm at the amazing

371

00:17:08,360 --> 00:17:05,730

meeting is quite often the MC and this

372

00:17:09,620 --> 00:17:08,370

this year once again it's I'm very glad

373

00:17:12,439 --> 00:17:09,630

to see it's going to be a good friend

374

00:17:15,009 --> 00:17:12,449

George shrub he'll ask or you'll ask the

375

00:17:17,779 --> 00:17:15,019

audience how many in the audience of the

376

00:17:20,449 --> 00:17:17,789

thousand-plus people are first-timers or

377

00:17:23,360 --> 00:17:20,459

first-timers as we call them and so many

378

00:17:25,610 --> 00:17:23,370

hands go up it's a good thing to see

379

00:17:27,490 --> 00:17:25,620

that people every year come for the

380

00:17:31,129 --> 00:17:27,500

first time and have a really good time

381

00:17:34,669 --> 00:17:31,139

right George frap really is the man for

382

00:17:37,639 --> 00:17:34,679

the job I can't either he's so good at

383

00:17:39,889 --> 00:17:37,649

what he does and he just has the right

384

00:17:42,139 --> 00:17:39,899

touch the perfect mix of being serious

385

00:17:44,029 --> 00:17:42,149

minded and very entertaining and fun and

386

00:17:45,710 --> 00:17:44,039

funny and musical and all of that and

387

00:17:47,930 --> 00:17:45,720

he's a bona fide you know

388

00:17:51,889 --> 00:17:47,940

dyed-in-the-wool skeptic oh that's great

389

00:17:55,070 --> 00:17:51,899

and you're right about this component of

390

00:17:57,379 --> 00:17:55,080

Tam being can I say an outreach event so

391

00:18:00,379 --> 00:17:57,389

if you have a thousand or more people

392

00:18:04,490 --> 00:18:00,389

every year and thirty or forty percent

393

00:18:07,159 --> 00:18:04,500

year after year our new folks who even

394

00:18:09,590 --> 00:18:07,169

say this is my first skeptic event ever

395

00:18:12,830 --> 00:18:09,600

you see that these large events aren't

396

00:18:15,620 --> 00:18:12,840

just can I say preaching to the choir

397

00:18:18,740 --> 00:18:15,630

they're reaching new folks who get

398

00:18:21,169 --> 00:18:18,750

turned on and plugged in and in fact I

399

00:18:23,810 --> 00:18:21,179

know a lot of local organizations local

400

00:18:27,350 --> 00:18:23,820

skeptics organizations or campus groups

401  
00:18:29,600 --> 00:18:27,360  
or projects that have flowed out of ten

402  
00:18:31,430 --> 00:18:29,610  
people meet it the first time in vegas

403  
00:18:33,919 --> 00:18:31,440  
at the amazing meeting and they get

404  
00:18:36,740 --> 00:18:33,929  
inspired and energized as you say and

405  
00:18:38,600 --> 00:18:36,750  
then they go back to nantucket or Peoria

406  
00:18:40,340 --> 00:18:38,610  
or wherever they're from and they get

407  
00:18:41,750 --> 00:18:40,350  
involved at that local level they start

408  
00:18:43,370 --> 00:18:41,760  
a group or they get involved with a

409  
00:18:46,160 --> 00:18:43,380  
campaign that's

410  
00:18:48,500 --> 00:18:46,170  
it that's the payoff of an event like

411  
00:18:50,060 --> 00:18:48,510  
the amazing meeting so folks there's the

412  
00:18:52,960 --> 00:18:50,070  
word if you haven't been to town before

413  
00:18:55,670 --> 00:18:52,970

you are in for a treat you get to

414

00:18:57,290 --> 00:18:55,680

socialize with wonderful people from all

415

00:18:59,180 --> 00:18:57,300

around the world many many different

416

00:19:01,370 --> 00:18:59,190

countries you can meet James Randi

417

00:19:03,560 --> 00:19:01,380

himself have a chat to him James Randi

418

00:19:05,660 --> 00:19:03,570

is always happy to meet people of the

419

00:19:07,310 --> 00:19:05,670

amazing meeting chat to other famous

420

00:19:10,160 --> 00:19:07,320

skeptics out there get some inside

421

00:19:14,660 --> 00:19:10,170

information or just sit back in the del

422

00:19:17,120 --> 00:19:14,670

mar bar and relax I cannot wait DJ I

423

00:19:20,240 --> 00:19:17,130

cannot wait for 10 coming up and i'll

424

00:19:23,150 --> 00:19:20,250

even give free pegasus origami folding

425

00:19:24,350 --> 00:19:23,160

lessons this year well I love the sound

426

00:19:27,230 --> 00:19:24,360

of that you're on the program in a

427

00:19:29,840 --> 00:19:27,240

couple places you've always contributed

428

00:19:31,520 --> 00:19:29,850

so mightily to our efforts and you're

429

00:19:33,140 --> 00:19:31,530

such a good friend of the James Randi

430

00:19:35,150 --> 00:19:33,150

Educational Foundation look forward to

431

00:19:37,880 --> 00:19:35,160

seeing you in just about five weeks my

432

00:19:40,190 --> 00:19:37,890

friend and and hopefully some of your

433

00:19:43,580 --> 00:19:40,200

listeners to thanks so much richer not a

434

00:19:46,070 --> 00:19:43,590

problem DJ folks WWE amazing meeting

435

00:20:00,450 --> 00:19:46,080

calm and we'll see you there DJ Grothe

436

00:20:05,320 --> 00:20:03,040

did you see that UFO sighting that made

437

00:20:07,000 --> 00:20:05,330

the news what did that latest study

438

00:20:09,430 --> 00:20:07,010

about alternative treatments really say

439

00:20:12,400 --> 00:20:09,440

is this photo making the rounds real or

440

00:20:14,260 --> 00:20:12,410

hoax duffel news is a unique website

441

00:20:16,420 --> 00:20:14,270

featuring news about pseudoscience the

442

00:20:18,120 --> 00:20:16,430

paranormal anomalies and questionable

443

00:20:21,070 --> 00:20:18,130

claims framed with the skeptical view

444

00:20:22,830 --> 00:20:21,080

come visit doubtful newscom every day

445

00:20:26,560 --> 00:20:22,840

for news about cryptozoology

446

00:20:29,470 --> 00:20:26,570

conspiracies shams scams and more follow

447

00:20:31,030 --> 00:20:29,480

us on twitter at doubtful news critical

448

00:20:33,310 --> 00:20:31,040

thinking is essential in assessing

449

00:20:41,640 --> 00:20:33,320

today's news duffel news helps you

450

00:20:48,280 --> 00:20:45,010

now it's time for dr. Richie reports

451

00:20:52,090 --> 00:20:48,290

with dr. Rachel Dunlop

452

00:20:54,160 --> 00:20:52,100

on travel 6abc Canberra it's 2211 the

453

00:20:56,320 --> 00:20:54,170

world's richest man richest man most of

454

00:20:58,510 --> 00:20:56,330

the time is in town in the country if

455

00:20:59,830 --> 00:20:58,520

you're watching ABC TV last night you

456

00:21:02,560 --> 00:20:59,840

might have seen Bill Gates talking to

457

00:21:04,930 --> 00:21:02,570

lease sales and participating in a

458

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

feisty Q&A that often focused on his

459

00:21:09,130 --> 00:21:06,950

change of direction from business

460

00:21:11,080 --> 00:21:09,140

towards philanthropy and a keystone in

461

00:21:13,900 --> 00:21:11,090

that process is his belief in the

462

00:21:15,790 --> 00:21:13,910

effectiveness of vaccination and it's

463

00:21:18,940 --> 00:21:15,800

urgent importance in developing nations

464

00:21:20,530 --> 00:21:18,950

in particular but also in the West here

465

00:21:22,330 --> 00:21:20,540

of course the debate about whether to

466

00:21:24,490 --> 00:21:22,340

exclude unvaccinated children from

467

00:21:26,410 --> 00:21:24,500

preschool attracted a lot of attention

468

00:21:28,240 --> 00:21:26,420

in the past week the New South Wales

469

00:21:30,700 --> 00:21:28,250

Government has already begun passing

470

00:21:32,410 --> 00:21:30,710

those regulations and on the

471

00:21:35,170 --> 00:21:32,420

conversation website this week's

472

00:21:37,090 --> 00:21:35,180

most-read story is by my next guest dr.

473

00:21:39,400 --> 00:21:37,100

Rachel Dunlop is a postdoctoral fellow

474

00:21:41,290 --> 00:21:39,410

in the school of medical and molecular

475

00:21:43,630 --> 00:21:41,300

bio sciences at the University of

476

00:21:46,390 --> 00:21:43,640

Technology in Sydney she's also vice

477

00:21:48,460 --> 00:21:46,400

president of Australian skeptics and an

478

00:21:51,160 --> 00:21:48,470

avowed opponent of anti vaccination

479

00:21:53,530 --> 00:21:51,170

campaign as Rachel hello to you hello

480

00:21:54,790 --> 00:21:53,540

thanks for having me my pleasure now I

481

00:21:56,500 --> 00:21:54,800

mentioned you would have welcomed that

482

00:21:58,480 --> 00:21:56,510

call from Bill Gates about the important

483

00:22:00,250 --> 00:21:58,490

importance of vaccinations he was very

484

00:22:02,440 --> 00:22:00,260

clear about how significant he sees it

485

00:22:03,940 --> 00:22:02,450

as being wasn't he absolutely and I

486

00:22:05,980 --> 00:22:03,950

think he's absolutely on the money and

487

00:22:09,390 --> 00:22:05,990

he's spending a lot of his own money in

488

00:22:11,860 --> 00:22:09,400

fact dedicating himself to putting

489

00:22:15,310 --> 00:22:11,870

vaccines into third world countries and

490

00:22:16,690 --> 00:22:15,320

to getting people who are most at risk

491

00:22:18,820 --> 00:22:16,700

of getting preventable diseases

492

00:22:20,620 --> 00:22:18,830

vaccinated so they can be protected and

493

00:22:22,480 --> 00:22:20,630

I think he's committed ten billion

494

00:22:24,160 --> 00:22:22,490

dollars over the next 10 years which is

495

00:22:26,620 --> 00:22:24,170

a huge amount of money and it's such a

496

00:22:28,390 --> 00:22:26,630

great thing that he's doing so if the

497

00:22:30,070 --> 00:22:28,400

public health code is so widely accepted

498

00:22:32,410 --> 00:22:30,080

in developing nations by the UN by

499

00:22:34,030 --> 00:22:32,420

global aid initiatives why are we having

500

00:22:36,460 --> 00:22:34,040

an argument about this in this country

501  
00:22:38,530 --> 00:22:36,470  
Rachel I know isn't it silly well I

502  
00:22:40,300 --> 00:22:38,540  
guess it's kind of like people say it's

503  
00:22:42,280 --> 00:22:40,310  
a first world problem in a way isn't it

504  
00:22:44,500 --> 00:22:42,290  
because we don't tend to see these

505  
00:22:46,120 --> 00:22:44,510  
diseases much anymore in first world

506  
00:22:48,460 --> 00:22:46,130  
countries like Australia we don't see

507  
00:22:49,720 --> 00:22:48,470  
polio here anymore but of course it is

508  
00:22:51,850 --> 00:22:49,730  
happening in other parts of the world

509  
00:22:53,740 --> 00:22:51,860  
and so I guess people get a little bit

510  
00:22:55,450 --> 00:22:53,750  
complacent if you like if they don't see

511  
00:22:57,730 --> 00:22:55,460  
the disease's anymore I mean even a

512  
00:23:00,100 --> 00:22:57,740  
generation ago there were people that

513  
00:23:02,050 --> 00:23:00,110

had polio many of us have grandparents

514

00:23:03,490 --> 00:23:02,060

at know people that had polio

515

00:23:05,350 --> 00:23:03,500

but we forget about these things that

516

00:23:07,780 --> 00:23:05,360

they're not in front of our faces and I

517

00:23:09,430 --> 00:23:07,790

suppose in a way vaccines are a victim

518

00:23:11,770 --> 00:23:09,440

of their own success in a way because

519

00:23:13,690 --> 00:23:11,780

they're so successful at eliminating

520

00:23:15,190 --> 00:23:13,700

preventable diseases that we don't see

521

00:23:17,560 --> 00:23:15,200

the disease's we forget how bad the

522

00:23:19,090 --> 00:23:17,570

diseases are and we elevate the risks

523

00:23:21,370 --> 00:23:19,100

from the vaccine instead of from the

524

00:23:22,570 --> 00:23:21,380

disease now is there a debate as such

525

00:23:24,640 --> 00:23:22,580

because i have to say Rachel this

526  
00:23:26,800 --> 00:23:24,650  
reminds me a little of the whole climate

527  
00:23:28,630 --> 00:23:26,810  
change issue that we seem to have a

528  
00:23:30,220 --> 00:23:28,640  
debate which is out of proportion to the

529  
00:23:32,620 --> 00:23:30,230  
general scientific consensus on the

530  
00:23:35,680 --> 00:23:32,630  
issue absolutely and in terms of the

531  
00:23:38,080 --> 00:23:35,690  
science there is no debate we know from

532  
00:23:40,840 --> 00:23:38,090  
years and years of Epidemiology from

533  
00:23:43,500 --> 00:23:40,850  
scientific research from clinical trials

534  
00:23:45,670 --> 00:23:43,510  
from lots of studies that vaccines are

535  
00:23:47,440 --> 00:23:45,680  
overwhelmingly safe they're cheap and

536  
00:23:49,960 --> 00:23:47,450  
they're effective so there's a very

537  
00:23:52,810 --> 00:23:49,970  
small number of people who oppose them

538  
00:23:54,190 --> 00:23:52,820

unfortunately they're very noisy so we

539

00:23:55,840 --> 00:23:54,200

hear their voices even though they're

540

00:23:57,490 --> 00:23:55,850

probably only about two percent of the

541

00:24:00,370 --> 00:23:57,500

population at least in this country

542

00:24:02,170 --> 00:24:00,380

oppose vaccination but overwhelmingly we

543

00:24:04,180 --> 00:24:02,180

know that the the best option is to

544

00:24:05,950 --> 00:24:04,190

vaccination before we go to the

545

00:24:08,530 --> 00:24:05,960

scientific issues Rachel tell me about

546

00:24:10,180 --> 00:24:08,540

your own area of expertise and why

547

00:24:12,400 --> 00:24:10,190

vaccinations come to concern you as a

548

00:24:14,140 --> 00:24:12,410

scientist yeah look I'm not an

549

00:24:15,880 --> 00:24:14,150

immunologist I'm not a clinician I'm a

550

00:24:18,280 --> 00:24:15,890

scientist and so I'm trained in

551  
00:24:20,230 --> 00:24:18,290  
clinically in analyzing scientific

552  
00:24:22,750 --> 00:24:20,240  
information and critically analyzing

553  
00:24:24,880 --> 00:24:22,760  
scientific publications and so I became

554  
00:24:26,980 --> 00:24:24,890  
aware of the way that anti-vaccination

555  
00:24:29,380 --> 00:24:26,990  
people were cherry-picking the science

556  
00:24:31,420 --> 00:24:29,390  
if you like to use it to support their

557  
00:24:33,280 --> 00:24:31,430  
arguments and I'm able to look at what

558  
00:24:35,590 --> 00:24:33,290  
they present as scientific evidence and

559  
00:24:38,320 --> 00:24:35,600  
I'm able to determine that it's actually

560  
00:24:42,160 --> 00:24:38,330  
not accurate and I became aware of this

561  
00:24:44,560 --> 00:24:42,170  
in about 2009 when a young baby died in

562  
00:24:46,300 --> 00:24:44,570  
new south wales from whooping cough and

563  
00:24:48,100 --> 00:24:46,310

the anti-vaccination movement in New

564

00:24:51,040 --> 00:24:48,110

South Wales attach the parents of this

565

00:24:52,890 --> 00:24:51,050

child because they were speaking out

566

00:24:55,510 --> 00:24:52,900

about the death of their daughter and

567

00:24:57,610 --> 00:24:55,520

advocating vaccination and I became very

568

00:24:59,320 --> 00:24:57,620

angry about that and a little bit upset

569

00:25:01,570 --> 00:24:59,330

and so since then I've been looking into

570

00:25:03,550 --> 00:25:01,580

the science and looking into the reasons

571

00:25:06,610 --> 00:25:03,560

why people oppose vaccines and that's

572

00:25:08,350 --> 00:25:06,620

where I came into this discussion my

573

00:25:09,340 --> 00:25:08,360

guest is dr. Rachel Dunlop from the

574

00:25:12,130 --> 00:25:09,350

school of medical and molecular

575

00:25:13,930 --> 00:25:12,140

Biosciences at UTS she's also vice

576

00:25:15,200 --> 00:25:13,940

president of the Australian skeptics and

577

00:25:18,019 --> 00:25:15,210

she's become something of a care

578

00:25:20,000 --> 00:25:18,029

pana against what she characterizes is

579

00:25:21,769 --> 00:25:20,010

the myths about vaccination you're on

580

00:25:23,120 --> 00:25:21,779

Triple 6abc Canberra and look I am

581

00:25:24,740 --> 00:25:23,130

interested in hearing from you on this

582

00:25:25,970 --> 00:25:24,750

if you've got thoughts on this whether

583

00:25:29,060 --> 00:25:25,980

there is a debate whether there should

584

00:25:33,320 --> 00:25:29,070

be one 300 681 triple six is the number

585

00:25:35,899 --> 00:25:33,330

the SMS 04 679 double to triple six and

586

00:25:38,120 --> 00:25:35,909

Rachel let's go to the first most

587

00:25:40,100 --> 00:25:38,130

commonly quoted concern that vaccination

588

00:25:41,690 --> 00:25:40,110

is linked to autism now then that began

589

00:25:44,180 --> 00:25:41,700

with this study by british researcher

590

00:25:46,039 --> 00:25:44,190

Andrew Wakefield I recall very clearly

591

00:25:48,529 --> 00:25:46,049

sitting in this studio several years ago

592

00:25:50,960 --> 00:25:48,539

when reports came out that the study had

593

00:25:53,389 --> 00:25:50,970

been comprehensively totally just

594

00:25:55,279 --> 00:25:53,399

debunked withdrawn by The Lancet that

595

00:25:57,980 --> 00:25:55,289

belief is still floating around though I

596

00:26:00,380 --> 00:25:57,990

know it's it's like an unsinkable rubber

597

00:26:02,570 --> 00:26:00,390

duck isn't it that that myth and I guess

598

00:26:04,549 --> 00:26:02,580

we know from scientific research now

599

00:26:06,440 --> 00:26:04,559

that a lot of people get their

600

00:26:07,820 --> 00:26:06,450

information about vaccinations and in

601  
00:26:09,769 --> 00:26:07,830  
fact health from the internet and

602  
00:26:11,510 --> 00:26:09,779  
recently there was a study that came out

603  
00:26:12,769 --> 00:26:11,520  
showing that about forty-five percent of

604  
00:26:14,690 --> 00:26:12,779  
parents that are concerned about

605  
00:26:17,480 --> 00:26:14,700  
vaccines are getting their information

606  
00:26:19,730 --> 00:26:17,490  
online and we know that the internet is

607  
00:26:21,380 --> 00:26:19,740  
not regulated nobody goes in there and

608  
00:26:23,380 --> 00:26:21,390  
peer reviews it if you like so there's a

609  
00:26:25,700 --> 00:26:23,390  
lot of misinformation out there and

610  
00:26:28,669 --> 00:26:25,710  
absolutely that study has been retracted

611  
00:26:30,100 --> 00:26:28,679  
in fact that study never actually looked

612  
00:26:32,779 --> 00:26:30,110  
at a link between autism and vaccines

613  
00:26:34,519 --> 00:26:32,789

but it was dr. andrew wakefield who has

614

00:26:37,490 --> 00:26:34,529

actually no longer a doctor by the way

615

00:26:39,260 --> 00:26:37,500

he was struck off the medical record but

616

00:26:41,090 --> 00:26:39,270

he said that at a press conference after

617

00:26:43,820 --> 00:26:41,100

that study was released and that was

618

00:26:46,370 --> 00:26:43,830

because he was paid by lawyers to

619

00:26:48,769 --> 00:26:46,380

discredit the MMR vaccine because he

620

00:26:51,710 --> 00:26:48,779

himself had a patent submitted for a

621

00:26:53,269 --> 00:26:51,720

single measles vaccine so he had so many

622

00:26:56,630 --> 00:26:53,279

conflicts of interest surrounding that

623

00:26:59,450 --> 00:26:56,640

study it wasn't funny and so there's not

624

00:27:00,799 --> 00:26:59,460

there's nothing that shows any good

625

00:27:03,919 --> 00:27:00,809

evidence that vaccines are linked to

626  
00:27:05,690 --> 00:27:03,929  
autism and as you say this this comes up

627  
00:27:07,700 --> 00:27:05,700  
on the internet search mechanism it's

628  
00:27:10,100 --> 00:27:07,710  
extraordinarily easy to manipulate that

629  
00:27:11,990 --> 00:27:10,110  
and it's not responsive to rankings of

630  
00:27:13,610 --> 00:27:12,000  
scientific credibility is that there's

631  
00:27:15,409 --> 00:27:13,620  
no sense that you're sort of picking up

632  
00:27:18,080 --> 00:27:15,419  
the most reliable study first know

633  
00:27:19,460 --> 00:27:18,090  
exactly and I think listeners should be

634  
00:27:20,960 --> 00:27:19,470  
aware that if you search if you're

635  
00:27:23,600 --> 00:27:20,970  
looking for reliable information online

636  
00:27:25,669 --> 00:27:23,610  
if you search for immunization instead

637  
00:27:28,220 --> 00:27:25,679  
of vaccination you're more likely to

638  
00:27:29,090 --> 00:27:28,230

find reliable information otherwise just

639

00:27:31,159 --> 00:27:29,100

go to immunize

640

00:27:32,539 --> 00:27:31,169

tralia or go to the Academy of Sciences

641

00:27:34,490 --> 00:27:32,549

there are websites around that are

642

00:27:35,870 --> 00:27:34,500

really helpful but just searching

643

00:27:38,180 --> 00:27:35,880

vaccinations online you get a lot of

644

00:27:40,130 --> 00:27:38,190

noise and a lot of it is not right now

645

00:27:41,870 --> 00:27:40,140

I've got a text from Oscar who says my

646

00:27:44,330 --> 00:27:41,880

kids risk side effects so that others

647

00:27:46,100 --> 00:27:44,340

can choose not to vaccinate now

648

00:27:48,529 --> 00:27:46,110

vaccination has meant as you were

649

00:27:50,480 --> 00:27:48,539

suggesting earlier that diseases like

650

00:27:52,760 --> 00:27:50,490

smallpox and polio have disappeared I

651  
00:27:54,500 --> 00:27:52,770  
think some people give themselves a

652  
00:27:56,539 --> 00:27:54,510  
leave pass on those vaccinations because

653  
00:27:58,430 --> 00:27:56,549  
they believe that no real further risk

654  
00:28:01,029 --> 00:27:58,440  
exists I mean is that a justifiable

655  
00:28:03,049 --> 00:28:01,039  
stance if you're worried about vaccines

656  
00:28:04,750 --> 00:28:03,059  
well you know the thing is these

657  
00:28:07,580 --> 00:28:04,760  
diseases haven't disappeared completely

658  
00:28:09,980 --> 00:28:07,590  
one that has is smallpox that has gone

659  
00:28:11,480 --> 00:28:09,990  
it's in two freezers now in scientific

660  
00:28:14,930 --> 00:28:11,490  
laboratories but the others are still

661  
00:28:16,700 --> 00:28:14,940  
around and if we if we get complacent

662  
00:28:18,680 --> 00:28:16,710  
about vaccinating they will come back

663  
00:28:21,590 --> 00:28:18,690

and we've just seen that recently in

664

00:28:23,180 --> 00:28:21,600

Wales in the UK where people became

665

00:28:25,399 --> 00:28:23,190

complacent about vaccinating for the

666

00:28:27,649 --> 00:28:25,409

measles mumps rubella after dr. Andrew

667

00:28:30,740 --> 00:28:27,659

Wakefield scare actually and now there's

668

00:28:33,500 --> 00:28:30,750

a huge explosion of measles in Wales as

669

00:28:35,029 --> 00:28:33,510

over a thousand cases now we also have a

670

00:28:36,440 --> 00:28:35,039

lot of whooping cough around as well

671

00:28:39,289 --> 00:28:36,450

because adults are not getting their

672

00:28:41,899 --> 00:28:39,299

boosters for whooping cough so vaccines

673

00:28:43,730 --> 00:28:41,909

don't also give us a lifelong immunity

674

00:28:45,620 --> 00:28:43,740

in some cases particularly with the

675

00:28:47,539 --> 00:28:45,630

whooping cough vaccine so we need to get

676  
00:28:49,220 --> 00:28:47,549  
boosters so we have to be aware of these

677  
00:28:51,470 --> 00:28:49,230  
things I mean if we get complacent these

678  
00:28:52,549 --> 00:28:51,480  
diseases will come back and I think that

679  
00:28:53,779 --> 00:28:52,559  
Bill Gates actually made a really

680  
00:28:56,990 --> 00:28:53,789  
interesting point last night when he

681  
00:28:58,549 --> 00:28:57,000  
talked about how communities with

682  
00:29:00,140 --> 00:28:58,559  
similar interests tend to congregate

683  
00:29:01,580 --> 00:29:00,150  
together and so if you had for example a

684  
00:29:03,620 --> 00:29:01,590  
school where a significant number of

685  
00:29:05,510 --> 00:29:03,630  
children were unvaccinated then the

686  
00:29:08,149 --> 00:29:05,520  
impact of a measles epidemic there well

687  
00:29:09,560 --> 00:29:08,159  
it would indeed be an epidemic this is

688  
00:29:11,419 --> 00:29:09,570

true and we've seen that happen in

689

00:29:13,490 --> 00:29:11,429

certain schools that don't condone

690

00:29:15,890 --> 00:29:13,500

vaccination it's happened in the UK

691

00:29:18,350 --> 00:29:15,900

quite a lot so yeah it's it's not

692

00:29:20,180 --> 00:29:18,360

something that and as I said before just

693

00:29:22,460 --> 00:29:20,190

because we don't see people dropping

694

00:29:24,799 --> 00:29:22,470

dead from polio doesn't mean that these

695

00:29:26,270 --> 00:29:24,809

diseases aren't around and it doesn't

696

00:29:28,460 --> 00:29:26,280

mean that they won't come back if we get

697

00:29:29,690 --> 00:29:28,470

complacent and they'd certainly will now

698

00:29:32,029 --> 00:29:29,700

I've got a caller on the line you okay

699

00:29:34,820 --> 00:29:32,039

to go to a call absolutely John's with

700

00:29:36,320 --> 00:29:34,830

me John hello hello and John you'd like

701  
00:29:37,310 --> 00:29:36,330  
to question this idea you you're

702  
00:29:40,880 --> 00:29:37,320  
wondering about the link between

703  
00:29:42,830 --> 00:29:40,890  
vaccinations and autism well first I

704  
00:29:44,780 --> 00:29:42,840  
just like to make the point that

705  
00:29:46,820 --> 00:29:44,790  
for these people worry about having kids

706  
00:29:48,080 --> 00:29:46,830  
turn up at school on back so or if their

707  
00:29:49,910 --> 00:29:48,090  
kids are excited what are they going to

708  
00:29:51,980 --> 00:29:49,920  
worry about and look we will go to that

709  
00:29:54,440 --> 00:29:51,990  
but have you got a speeding at the point

710  
00:29:58,180 --> 00:29:54,450  
on yeah I'm making is that okay there's

711  
00:30:02,300 --> 00:29:58,190  
been an explosion in recent times in

712  
00:30:04,160 --> 00:30:02,310  
what autism is is is increased at a rate

713  
00:30:06,680 --> 00:30:04,170

which is considered be almost like at

714

00:30:08,990 --> 00:30:06,690

epidemic proportions a copy of it you

715

00:30:10,520 --> 00:30:09,000

know blamed on genes as the same thing

716

00:30:12,530 --> 00:30:10,530

with a lot of the autoimmune diseases

717

00:30:14,840 --> 00:30:12,540

they've exploded like when I was a kid

718

00:30:17,150 --> 00:30:14,850

no one ever killed over from you know

719

00:30:19,310 --> 00:30:17,160

eating peanuts or anything like that so

720

00:30:22,010 --> 00:30:19,320

there's these diseases around now they

721

00:30:24,890 --> 00:30:22,020

happen to coincide with a big increase

722

00:30:27,470 --> 00:30:24,900

in the number of vaccines given the kids

723

00:30:29,480 --> 00:30:27,480

no not saying as other people are

724

00:30:32,660 --> 00:30:29,490

there's a direct connection but I'm

725

00:30:35,380 --> 00:30:32,670

saying how do you know that there's no

726

00:30:38,900 --> 00:30:35,390

connection between this explosion in

727

00:30:40,790 --> 00:30:38,910

autoimmune disease and autism and the

728

00:30:43,100 --> 00:30:40,800

vaccinations if you don't know what

729

00:30:46,010 --> 00:30:43,110

causes autism or what's caused this

730

00:30:48,290 --> 00:30:46,020

spike in autoimmune illnesses among

731

00:30:50,540 --> 00:30:48,300

children which is actually a very fair

732

00:30:52,550 --> 00:30:50,550

question John Thank You Rachel over to

733

00:30:54,440 --> 00:30:52,560

you yeah I think John makes an

734

00:30:56,780 --> 00:30:54,450

interesting point and that is that there

735

00:30:59,630 --> 00:30:56,790

is a huge increase in autism recently

736

00:31:01,670 --> 00:30:59,640

but people make the connection that kids

737

00:31:02,960 --> 00:31:01,680

get vaccines kids get autism well you

738

00:31:04,610 --> 00:31:02,970

know there's been a huge increase in the

739

00:31:06,890 --> 00:31:04,620

number of mobile phones that people use

740

00:31:08,510 --> 00:31:06,900

that doesn't mean they cause autism but

741

00:31:10,040 --> 00:31:08,520

we know John John's point there to be

742

00:31:11,630 --> 00:31:10,050

fair was that if we don't know what

743

00:31:13,670 --> 00:31:11,640

causes autism how do we know that there

744

00:31:16,010 --> 00:31:13,680

isn't a connection with vaccinations

745

00:31:17,420 --> 00:31:16,020

fair enough and you know what scientists

746

00:31:19,610 --> 00:31:17,430

have looked at that and they've looked a

747

00:31:20,960 --> 00:31:19,620

bit thoroughly and the reason why we've

748

00:31:24,140 --> 00:31:20,970

looked at it is because Wakefield

749

00:31:25,790 --> 00:31:24,150

suggested that in 1998 since then there

750

00:31:27,260 --> 00:31:25,800

have been dozens and dozens of studies

751  
00:31:29,510 --> 00:31:27,270  
looking at whether there's a link

752  
00:31:31,400 --> 00:31:29,520  
between vaccines and autism the larger

753  
00:31:33,470 --> 00:31:31,410  
study was done in Denmark it involved

754  
00:31:35,450 --> 00:31:33,480  
half a million children it looked at the

755  
00:31:37,670 --> 00:31:35,460  
difference between development in kids

756  
00:31:39,980 --> 00:31:37,680  
that have had the MMR vaccine and kids

757  
00:31:42,200 --> 00:31:39,990  
that hadn't in fact there was no link

758  
00:31:45,920 --> 00:31:42,210  
between vaccines and autism we've also

759  
00:31:47,480 --> 00:31:45,930  
looked at a about 12,000 studies the

760  
00:31:49,400 --> 00:31:47,490  
Institute of Medicine in the US has

761  
00:31:50,660 --> 00:31:49,410  
looked at this and they've found that

762  
00:31:52,090 --> 00:31:50,670  
there's no link between vaccines and

763  
00:31:54,470 --> 00:31:52,100

autism that has been absolutely

764

00:31:56,000 --> 00:31:54,480

demonstrated by science and i think that

765

00:31:56,630 --> 00:31:56,010

the coincidence here rachel is that the

766

00:31:58,010 --> 00:31:56,640

symptoms of all

767

00:31:59,750 --> 00:31:58,020

some often emerge at about the same time

768

00:32:01,850 --> 00:31:59,760

that people have D vaccinations yeah

769

00:32:03,770 --> 00:32:01,860

it's unfortunate and the the the thing

770

00:32:05,240 --> 00:32:03,780

that um the thing about genes is there

771

00:32:07,010 --> 00:32:05,250

is some connection to genes we don't

772

00:32:10,310 --> 00:32:07,020

know exactly yet what causes autism and

773

00:32:12,170 --> 00:32:10,320

that is a problem but it used to be that

774

00:32:14,120 --> 00:32:12,180

autism was diagnosed will around the age

775

00:32:15,680 --> 00:32:14,130

of 2 we're beginning as scientists

776  
00:32:17,540 --> 00:32:15,690  
beginning to get to a stage where we can

777  
00:32:19,460 --> 00:32:17,550  
do it earlier at around six months and

778  
00:32:20,720 --> 00:32:19,470  
that is going to make it less likely

779  
00:32:22,490 --> 00:32:20,730  
that people will make that connection

780  
00:32:24,320 --> 00:32:22,500  
but it is an unfortunate coincidence

781  
00:32:26,060 --> 00:32:24,330  
because that's the way it happened yes

782  
00:32:27,470 --> 00:32:26,070  
and actually a much earlier diagnosis of

783  
00:32:29,720 --> 00:32:27,480  
autism would be a really interesting

784  
00:32:31,700 --> 00:32:29,730  
endeavor if we looked at how this all

785  
00:32:33,350 --> 00:32:31,710  
works out Oscar says the reason John's

786  
00:32:35,630 --> 00:32:33,360  
kids can go around and vaccinated is

787  
00:32:37,520 --> 00:32:35,640  
because mine are steve says I'm in my

788  
00:32:39,440 --> 00:32:37,530

40s I still remember how sick I was with

789

00:32:40,880 --> 00:32:39,450

measles and chicken pox these never

790

00:32:42,380 --> 00:32:40,890

killed any of the neighborhood kids but

791

00:32:44,690 --> 00:32:42,390

there was a deaf girl his mum had

792

00:32:46,850 --> 00:32:44,700

rubella in pregnancy and of course that

793

00:32:48,800 --> 00:32:46,860

the birth defects are another important

794

00:32:50,810 --> 00:32:48,810

link here Rachel that measles didn't

795

00:32:51,950 --> 00:32:50,820

kill me either but it's something that

796

00:32:53,810 --> 00:32:51,960

could have had profound lifelong

797

00:32:55,670 --> 00:32:53,820

consequences rubella certainly for

798

00:32:56,870 --> 00:32:55,680

people's well-being yeah and this is the

799

00:32:58,700 --> 00:32:56,880

thing that kind of annoys me about

800

00:33:01,520 --> 00:32:58,710

people that oppose vaccinations they

801  
00:33:03,950 --> 00:33:01,530  
cite well you know people stopped dying

802  
00:33:05,360 --> 00:33:03,960  
from infectious diseases before vaccines

803  
00:33:08,300 --> 00:33:05,370  
were introduced well yes they stopped

804  
00:33:10,220 --> 00:33:08,310  
dying for to some extent because we got

805  
00:33:12,530 --> 00:33:10,230  
in create improved water we got improved

806  
00:33:14,660 --> 00:33:12,540  
sewage but they didn't stop getting the

807  
00:33:16,730 --> 00:33:14,670  
disease so they didn't stop getting you

808  
00:33:20,060 --> 00:33:16,740  
know long-term suffering and effects

809  
00:33:21,530 --> 00:33:20,070  
like deafness etc so it's important that

810  
00:33:23,150 --> 00:33:21,540  
we remember when we talk about these

811  
00:33:24,860 --> 00:33:23,160  
infectious diseases they don't just kill

812  
00:33:26,660 --> 00:33:24,870  
people they give them a long term

813  
00:33:29,000 --> 00:33:26,670

complications and long-term effects that

814

00:33:30,440 --> 00:33:29,010

can also be very bad is it true though

815

00:33:32,030 --> 00:33:30,450

that more vaccinated people get the

816

00:33:33,410 --> 00:33:32,040

diseases that unvaccinated or is that

817

00:33:36,890 --> 00:33:33,420

essentially a manipulation of the

818

00:33:39,380 --> 00:33:36,900

numbers once again it is I mean it's

819

00:33:42,400 --> 00:33:39,390

true that more people get their can get

820

00:33:44,540 --> 00:33:42,410

the disease but percentage-wise no and

821

00:33:46,820 --> 00:33:44,550

this is a little bit complicated but

822

00:33:48,590 --> 00:33:46,830

it's because not all vaccines are one

823

00:33:50,630 --> 00:33:48,600

hundred percent effective and not all

824

00:33:52,490 --> 00:33:50,640

people respond to them one hundred

825

00:33:54,590 --> 00:33:52,500

percent effectively so if there is an

826

00:33:56,120 --> 00:33:54,600

outbreak if you're vaccinated you might

827

00:33:57,950 --> 00:33:56,130

still pick up the disease I me no

828

00:33:59,600 --> 00:33:57,960

vaccines not like a force field you can

829

00:34:01,610 --> 00:33:59,610

still like touch a door or open

830

00:34:04,220 --> 00:34:01,620

something and pick up a bacteria or a

831

00:34:06,050 --> 00:34:04,230

virus but you will get a much less

832

00:34:09,350 --> 00:34:06,060

severe cater the disease and the

833

00:34:10,579 --> 00:34:09,360

duration will be shorter in all cases in

834

00:34:11,690 --> 00:34:10,589

studies that have shown

835

00:34:12,829 --> 00:34:11,700

that have looked at the difference

836

00:34:15,469 --> 00:34:12,839

between vaccinated and unvaccinated

837

00:34:17,899 --> 00:34:15,479

people the only difference is that

838

00:34:20,209 --> 00:34:17,909

vaccinate unvaccinated people get more

839

00:34:22,459 --> 00:34:20,219

vaccine-preventable diseases it's pretty

840

00:34:23,899 --> 00:34:22,469

obvious vaccinations not mandatory we

841

00:34:25,549 --> 00:34:23,909

can't make that happen we can only rely

842

00:34:27,829 --> 00:34:25,559

on public health campaigns to enforce

843

00:34:29,930 --> 00:34:27,839

the idea that it really matters but if

844

00:34:31,909 --> 00:34:29,940

you do decide otherwise if you are

845

00:34:34,849 --> 00:34:31,919

willing to take the risk when then why

846

00:34:36,649 --> 00:34:34,859

is that anyone else's business it's

847

00:34:39,259 --> 00:34:36,659

because of this thing we call community

848

00:34:41,359 --> 00:34:39,269

immunity if you like and it's I guess in

849

00:34:43,099 --> 00:34:41,369

my opinion I think vaccination is a

850

00:34:45,349 --> 00:34:43,109

social responsibility not just a

851  
00:34:46,639 --> 00:34:45,359  
personal choice and that's because there

852  
00:34:48,289 --> 00:34:46,649  
are a lot of people in the community who

853  
00:34:50,959 --> 00:34:48,299  
can't be vaccinated or they're too young

854  
00:34:53,029 --> 00:34:50,969  
to be vaccinated now I mentioned earlier

855  
00:34:55,159 --> 00:34:53,039  
that I became involved in this issue

856  
00:34:57,319 --> 00:34:55,169  
when I heard of a four week old baby who

857  
00:34:59,150 --> 00:34:57,329  
died of pertussis now for week all

858  
00:35:01,430 --> 00:34:59,160  
babies are too young to be vaccinated so

859  
00:35:04,309 --> 00:35:01,440  
they are unprotected and they can't be

860  
00:35:07,670 --> 00:35:04,319  
vaccinated but if we as a community are

861  
00:35:09,529 --> 00:35:07,680  
all vaccinated then we buy our community

862  
00:35:11,690 --> 00:35:09,539  
immunity can help prevent those diseases

863  
00:35:14,029 --> 00:35:11,700

take hold in a in a part of the

864

00:35:15,499 --> 00:35:14,039

community Maria so that I had whooping

865

00:35:17,719 --> 00:35:15,509

cough two years ago I can't imagine how

866

00:35:19,910 --> 00:35:17,729

baby could survive it yeah well you know

867

00:35:22,009 --> 00:35:19,920

what we do it to protect people that are

868

00:35:23,359 --> 00:35:22,019

that can't be vaccinated or a vulnerable

869

00:35:25,940 --> 00:35:23,369

because maybe they've got an autoimmune

870

00:35:27,019 --> 00:35:25,950

disease they've got their having cancer

871

00:35:29,390 --> 00:35:27,029

therapy they're getting chemotherapy

872

00:35:31,640 --> 00:35:29,400

those people that can't be vaccinated if

873

00:35:33,229 --> 00:35:31,650

they have an egg allergy for example we

874

00:35:35,509 --> 00:35:33,239

protect everybody else if we're all

875

00:35:37,400 --> 00:35:35,519

vaccinated another question via the SMS

876

00:35:39,680 --> 00:35:37,410

should older people be revaccinated and

877

00:35:42,019 --> 00:35:39,690

if so which ones yeah really good

878

00:35:43,729 --> 00:35:42,029

question um well in particular with the

879

00:35:46,549 --> 00:35:43,739

whooping cough vaccine it doesn't last

880

00:35:48,259 --> 00:35:46,559

forever and this is being a real problem

881

00:35:49,910 --> 00:35:48,269

recently because it's estimated that

882

00:35:52,069 --> 00:35:49,920

only about eleven percent of adults are

883

00:35:54,620 --> 00:35:52,079

actually covered or immune to whooping

884

00:35:56,870 --> 00:35:54,630

cough I had my booster recently everyone

885

00:35:58,130 --> 00:35:56,880

should get their booster because we need

886

00:36:00,109 --> 00:35:58,140

to protect those people that are too

887

00:36:02,870 --> 00:36:00,119

young or unable to be vaccinated against

888

00:36:05,180 --> 00:36:02,880

whooping cough and another text saying

889

00:36:06,799 --> 00:36:05,190

anything believable is there an increase

890

00:36:09,109 --> 00:36:06,809

in autism because the simply an increase

891

00:36:11,469 --> 00:36:09,119

in diagnosis of autism and their yeah

892

00:36:14,719 --> 00:36:11,479

that's part of it as well actually yeah

893

00:36:17,269 --> 00:36:14,729

indeed do vaccines actually contain

894

00:36:19,190 --> 00:36:17,279

toxins Rachel well they contain

895

00:36:21,140 --> 00:36:19,200

chemicals and everything contains

896

00:36:23,299 --> 00:36:21,150

chemicals we're made of chemicals by the

897

00:36:24,620 --> 00:36:23,309

way you know water is a chemical the air

898

00:36:26,030 --> 00:36:24,630

is a chemical

899

00:36:28,220 --> 00:36:26,040

all these things are there for a reason

900

00:36:30,160 --> 00:36:28,230

and they're at levels that are so low

901  
00:36:33,830 --> 00:36:30,170  
that they're not going to cause toxicity

902  
00:36:35,810 --> 00:36:33,840  
so it's kind of like the the dose the

903  
00:36:37,040 --> 00:36:35,820  
poison is in the dose you know you can

904  
00:36:39,860 --> 00:36:37,050  
actually die from drinking too much

905  
00:36:41,480 --> 00:36:39,870  
water believe it or not so this there's

906  
00:36:43,040 --> 00:36:41,490  
very low levels of some things in

907  
00:36:44,390 --> 00:36:43,050  
vaccines that are there for a reason but

908  
00:36:46,940 --> 00:36:44,400  
they're not going to cause any problems

909  
00:36:48,740 --> 00:36:46,950  
because they're very low Rachel you have

910  
00:36:50,720 --> 00:36:48,750  
been extensively really heavily

911  
00:36:53,420 --> 00:36:50,730  
criticized by opponents of vaccination

912  
00:36:56,630 --> 00:36:53,430  
and yes quick quick search on the you

913  
00:36:57,620 --> 00:36:56,640

get someone else well in it day but you

914

00:37:00,020 --> 00:36:57,630

know happy to give you the opportunity

915

00:37:02,570 --> 00:37:00,030

to receive more of that criticism thanks

916

00:37:04,310 --> 00:37:02,580

but how do you respond to opponents of

917

00:37:06,530 --> 00:37:04,320

vaccination who say look this is a free

918

00:37:08,360 --> 00:37:06,540

choice I'm making up my own mind on the

919

00:37:11,510 --> 00:37:08,370

basis of my research I believe in this

920

00:37:13,130 --> 00:37:11,520

very sincerely and very genuinely you

921

00:37:14,570 --> 00:37:13,140

know I don't actually try to reach out

922

00:37:15,980 --> 00:37:14,580

to those people because they've made up

923

00:37:18,050 --> 00:37:15,990

their mind and they're not going to be

924

00:37:20,720 --> 00:37:18,060

influenced at all what I try to do with

925

00:37:23,090 --> 00:37:20,730

my scientific communication is reach

926  
00:37:24,200 --> 00:37:23,100  
those people who are confused or may

927  
00:37:26,240 --> 00:37:24,210  
have read some stuff on the internet

928  
00:37:27,980 --> 00:37:26,250  
that made them worried and that's

929  
00:37:29,630 --> 00:37:27,990  
roughly around thirty to forty five

930  
00:37:32,330 --> 00:37:29,640  
percent of parents based on a recent

931  
00:37:34,940 --> 00:37:32,340  
study so I hope that from the work that

932  
00:37:36,800 --> 00:37:34,950  
I do it enables people to look at the

933  
00:37:39,200 --> 00:37:36,810  
facts and at the science and make a

934  
00:37:41,750 --> 00:37:39,210  
decision based on rational scientific

935  
00:37:43,100 --> 00:37:41,760  
information it's it's a highly emotive

936  
00:37:45,350 --> 00:37:43,110  
debate in some quarters though isn't it

937  
00:37:48,200 --> 00:37:45,360  
Rachel yeah it is it's it's incredibly

938  
00:37:50,540 --> 00:37:48,210

nasty as well but someone's got to do it

939

00:37:52,400 --> 00:37:50,550

so I'm taking one for the team has that

940

00:37:54,470 --> 00:37:52,410

been your experience that you get a

941

00:37:56,090 --> 00:37:54,480

really personally nasty response from

942

00:37:57,890 --> 00:37:56,100

people who opposed to vaccinations well

943

00:38:00,170 --> 00:37:57,900

look absolutely and if anyone saw the

944

00:38:03,170 --> 00:38:00,180

front pages of the Telegraph on Sunday

945

00:38:05,090 --> 00:38:03,180

in New South Wales Tony McCaffrey who

946

00:38:07,760 --> 00:38:05,100

whose daughter died of whooping cough in

947

00:38:10,730 --> 00:38:07,770

2009 she was describing how she was

948

00:38:12,620 --> 00:38:10,740

vilified by anti-vaccination opponents

949

00:38:14,570 --> 00:38:12,630

and you know when her daughter died she

950

00:38:16,580 --> 00:38:14,580

was told to harden up and that you know

951  
00:38:18,800 --> 00:38:16,590  
in fact some one of those people rang

952  
00:38:21,020 --> 00:38:18,810  
the health department to find out if her

953  
00:38:23,870 --> 00:38:21,030  
daughter really died from Pat asses so

954  
00:38:25,580 --> 00:38:23,880  
this stuff is just absolutely awful and

955  
00:38:27,620 --> 00:38:25,590  
for four years she's been harassed

956  
00:38:29,150 --> 00:38:27,630  
harassed harassed by these people but

957  
00:38:31,190 --> 00:38:29,160  
they don't seem to care and they don't

958  
00:38:35,660 --> 00:38:31,200  
seem to think it's a problem with with a

959  
00:38:37,370 --> 00:38:35,670  
dead infant yes yes and let me and to

960  
00:38:38,390 --> 00:38:37,380  
this day those people are still writing

961  
00:38:39,920 --> 00:38:38,400  
blogs about it and

962  
00:38:41,750 --> 00:38:39,930  
ending the fact that they called the

963  
00:38:44,720 --> 00:38:41,760

health department and said we want to

964

00:38:46,250 --> 00:38:44,730

see her autopsy reports because that's

965

00:38:47,750 --> 00:38:46,260

what you do when your baby dies you

966

00:38:49,789 --> 00:38:47,760

pretend that it's from something else

967

00:38:52,279 --> 00:38:49,799

for your own causes that's yeah and you

968

00:38:54,589 --> 00:38:52,289

also say supposedly died of pertussis

969

00:38:56,599 --> 00:38:54,599

and then you send email saying well it's

970

00:39:00,140 --> 00:38:56,609

your fault because you didn't breastfeed

971

00:39:02,120 --> 00:39:00,150

her or it it's just I you know it's it's

972

00:39:04,279 --> 00:39:02,130

so abhorrent that it just it beggars

973

00:39:05,900 --> 00:39:04,289

belief this says wonderful to hear this

974

00:39:09,019 --> 00:39:05,910

support for vaccination you keep up the

975

00:39:11,630 --> 00:39:09,029

good work Rachel Rachel really I thank

976  
00:39:14,539 --> 00:39:11,640  
you talk to you about this and and thank

977  
00:39:16,849 --> 00:39:14,549  
you for for applying a very scientific

978  
00:39:18,260 --> 00:39:16,859  
razor to all the debate that surrounds

979  
00:39:19,460 --> 00:39:18,270  
all of this we appreciate your time very

980  
00:39:20,930 --> 00:39:19,470  
much and thank you for having me I

981  
00:39:23,569 --> 00:39:20,940  
appreciate the opportunity my pleasure

982  
00:39:24,920 --> 00:39:23,579  
thanks Rachel bye bye bye dr. Rachel

983  
00:39:27,049 --> 00:39:24,930  
Dunlop from the school of medical and

984  
00:39:29,299 --> 00:39:27,059  
molecular Biosciences at UTS and if

985  
00:39:32,420 --> 00:39:29,309  
you're interested in in her contentions

986  
00:39:34,849 --> 00:39:32,430  
six myths about vaccination is on the

987  
00:39:36,799 --> 00:39:34,859  
conversation website it's the most read

988  
00:39:48,400 --> 00:39:36,809

article this week and well worth a look

989

00:39:54,920 --> 00:39:51,350

nice antidote industry skeptic zone

990

00:39:59,330 --> 00:39:54,930

basically suit ohmeda won't escape toy

991

00:40:02,630 --> 00:39:59,340

talk on da CA n sceptile Shigure crucial

992

00:40:05,450 --> 00:40:02,640

a podcast llamo o momentito with her own

993

00:40:08,360 --> 00:40:05,460

see no party pocket and Helios in the

994

00:40:11,870 --> 00:40:08,370

atlantic ocean in maroon rajesh

995

00:40:15,320 --> 00:40:11,880

attention chatty Lana cncl link Li Dao

996

00:40:17,980 --> 00:40:15,330

itunes the Chihuahua Jan SATA sceptile

997

00:40:22,040 --> 00:40:17,990

puta chiffon well one of the ones

998

00:40:27,680 --> 00:40:25,310

the script I'd science podcast by Brian

999

00:40:30,170 --> 00:40:27,690

Dungey is now available for Chinese

1000

00:40:33,740 --> 00:40:30,180

audience please tell your Chinese

1001  
00:40:36,560 --> 00:40:33,750  
friends to visit skipped item the CN a

1002  
00:40:52,450 --> 00:40:36,570  
fine skip toyed and the Chinese itunes

1003  
00:40:58,190 --> 00:40:54,920  
welcome to a week in science from our

1004  
00:41:01,760 --> 00:40:58,200  
iOS this week seeing inside molecules

1005  
00:41:11,210 --> 00:41:01,770  
playing cupid for balls and tiny ancient

1006  
00:41:13,790 --> 00:41:11,220  
primates first up an imaging technique

1007  
00:41:16,580 --> 00:41:13,800  
that allows us to see inside molecules

1008  
00:41:18,800 --> 00:41:16,590  
molecules are currently identified by

1009  
00:41:21,530 --> 00:41:18,810  
detecting signature vibrations that are

1010  
00:41:23,660 --> 00:41:21,540  
unique like fingerprints japanese

1011  
00:41:26,000 --> 00:41:23,670  
researchers have enhanced this technique

1012  
00:41:28,760 --> 00:41:26,010  
so it's sensitive enough to map the

1013  
00:41:31,100 --> 00:41:28,770

structure of an individual molecule this

1014

00:41:33,380 --> 00:41:31,110

high res method could allow us to

1015

00:41:37,270 --> 00:41:33,390

actually build molecules from scratch

1016

00:41:39,380 --> 00:41:37,280

and change their functionality

1017

00:41:41,900 --> 00:41:39,390

researchers have played Cupid with

1018

00:41:44,660 --> 00:41:41,910

prairie voles using a special love drug

1019

00:41:47,240 --> 00:41:44,670

voles are one of very few monogamous

1020

00:41:49,520 --> 00:41:47,250

animals forming lifelong pair bonds

1021

00:41:51,530 --> 00:41:49,530

bonding naturally occurs after mating

1022

00:41:53,420 --> 00:41:51,540

when changes to the voles gene

1023

00:41:55,940 --> 00:41:53,430

structures trigger the release of

1024

00:41:58,070 --> 00:41:55,950

certain love hormones scientists

1025

00:42:00,440 --> 00:41:58,080

injected female prairie voles with a

1026  
00:42:02,600 --> 00:42:00,450  
drug that made these genes trigger the

1027  
00:42:05,120 --> 00:42:02,610  
hormone release causing them to pair off

1028  
00:42:08,480 --> 00:42:05,130  
without ever mating I wonder if that

1029  
00:42:14,930 --> 00:42:11,990  
a climate change data review suggests

1030  
00:42:16,880 --> 00:42:14,940  
that ice loss in Antarctica may be less

1031  
00:42:19,040 --> 00:42:16,890  
than previously predicted while in

1032  
00:42:20,930 --> 00:42:19,050  
Greenland it may be more general

1033  
00:42:23,840 --> 00:42:20,940  
anesthetic could increase the risk of

1034  
00:42:25,430 --> 00:42:23,850  
dementia in elderly patients astronomers

1035  
00:42:28,490 --> 00:42:25,440  
have photographed a never-before-seen

1036  
00:42:30,710 --> 00:42:28,500  
gaseous planet orbiting its star three

1037  
00:42:32,990 --> 00:42:30,720  
hundred light-years away and male ly

1038  
00:42:35,090 --> 00:42:33,000

beds coordinate song and dance moves in

1039

00:42:37,430 --> 00:42:35,100

their courtship displays a level of

1040

00:42:42,260 --> 00:42:37,440

sophistication previously known only in

1041

00:42:45,010 --> 00:42:42,270

humans wrapping up this week let's step

1042

00:42:47,270 --> 00:42:45,020

55 million years into the past

1043

00:42:49,340 --> 00:42:47,280

scientists have discovered the oldest

1044

00:42:51,740 --> 00:42:49,350

nearly complete skeleton of a tiny

1045

00:42:54,380 --> 00:42:51,750

primate it was about seven centimeters

1046

00:42:56,690 --> 00:42:54,390

long weighing no more than 30 grams as

1047

00:42:59,000 --> 00:42:56,700

small as a modern pygmy mouse lemur

1048

00:43:01,940 --> 00:42:59,010

features of the skeleton suggests it was

1049

00:43:04,190 --> 00:43:01,950

a frequently / had good vision and ate

1050

00:43:05,840 --> 00:43:04,200

insects this discovery helps us

1051  
00:43:08,450 --> 00:43:05,850  
understand the early evolution of

1052  
00:43:12,440 --> 00:43:08,460  
primates and when they split from human

1053  
00:43:14,540 --> 00:43:12,450  
ancestors we cover lots of health

1054  
00:43:16,510 --> 00:43:14,550  
stories on a week in science and our

1055  
00:43:19,970 --> 00:43:16,520  
upcoming event Lost in Translation

1056  
00:43:21,740 --> 00:43:19,980  
delves even deeper on jun 19 we'll look

1057  
00:43:23,450 --> 00:43:21,750  
at the barriers that stop cutting edge

1058  
00:43:25,700 --> 00:43:23,460  
health research from reaching health

1059  
00:43:27,470 --> 00:43:25,710  
care practice you can join the audience

1060  
00:43:30,109 --> 00:43:27,480  
in Adelaide or tune in to the live

1061  
00:43:32,000 --> 00:43:30,119  
stream online details on the rirs

1062  
00:43:34,010 --> 00:43:32,010  
website that's been the highlights of

1063  
00:43:36,260 --> 00:43:34,020

another big week in science for more

1064

00:43:39,890 --> 00:43:36,270

information and science news jump onto

1065

00:43:41,900 --> 00:43:39,900

the rars website at arias org dot a you

1066

00:43:44,630 --> 00:43:41,910

where you can also sign up for

1067

00:43:46,820 --> 00:43:44,640

notifications of future episodes don't

1068

00:43:50,060 --> 00:43:46,830

forget follow a week insight on twitter

1069

00:43:52,310 --> 00:43:50,070

using the hashtag week inside I'm Tony

1070

00:44:04,930 --> 00:43:52,320

Amaya and on behalf of the our iOS team

1071

00:44:10,900 --> 00:44:07,839

I'm courses hello an ally Dawson to her

1072

00:44:12,790 --> 00:44:10,910

at the skeptics on podcasts vossted here

1073

00:44:14,680 --> 00:44:12,800

this is alvin Dutch Manannan skeptic a

1074

00:44:18,359 --> 00:44:14,690

fab and gift for vital information

1075

00:44:23,349 --> 00:44:18,369

newborns on the skeptic a magazine bucht

1076

00:44:26,680 --> 00:44:23,359

vvv point gavey oop a punk talk hv

1077

00:44:29,500 --> 00:44:26,690

dejala vay vay vay pumped give a rupee

1078

00:44:40,970 --> 00:44:29,510

Paul talk on tons of it say on facebook

1079

00:44:48,660 --> 00:44:46,140

here's my not spooky action at the

1080

00:44:52,900 --> 00:44:51,220

well they've remodeled the usual studio

1081

00:44:54,880 --> 00:44:52,910

we have here at skeptics in the pub they

1082

00:44:56,230 --> 00:44:54,890

used to be like a library book and all

1083

00:44:58,480 --> 00:44:56,240

this stuff but it's gotten all funky now

1084

00:45:00,430 --> 00:44:58,490

it looks like a disco and in fact I

1085

00:45:02,680 --> 00:45:00,440

think some ecstasy I bought off a

1086

00:45:04,660 --> 00:45:02,690

backpacker in 1989 is just coming on

1087

00:45:06,580 --> 00:45:04,670

right now we have a few people walking

1088

00:45:07,960 --> 00:45:06,590

through the studio but any regulars into

1089

00:45:10,300 --> 00:45:07,970

this show will know that's what happens

1090

00:45:12,430 --> 00:45:10,310

and who's our special guest today oh and

1091

00:45:14,200 --> 00:45:12,440

dr. Paul Willis hello hello how are you

1092

00:45:15,850 --> 00:45:14,210

you know you're normally based in South

1093

00:45:17,230 --> 00:45:15,860

Australia actually looking three inches

1094

00:45:19,090 --> 00:45:17,240

taller than the last time I saw you I

1095

00:45:20,830 --> 00:45:19,100

know I'm it's the shoes it's I would it

1096

00:45:22,120 --> 00:45:20,840

is a haircut I think this hair kind of

1097

00:45:23,530 --> 00:45:22,130

minds a bit of a conspiracy well I don't

1098

00:45:26,230 --> 00:45:23,540

know who you borrowed it from but I'll

1099

00:45:28,600 --> 00:45:26,240

get your money back Oh agent Cooper Kyle

1100

00:45:30,820 --> 00:45:28,610

MacLachlan I think I ended up with Mad

1101

00:45:33,910 --> 00:45:30,830

Max no I think it's just retreating but

1102

00:45:36,100 --> 00:45:33,920

look at could be you've journeyed far

1103

00:45:38,650 --> 00:45:36,110

and wide from South Australia here I've

1104

00:45:41,800 --> 00:45:38,660

been on the road actually for a week and

1105

00:45:44,260 --> 00:45:41,810

a half I was in Canberra at the academy

1106

00:45:47,770 --> 00:45:44,270

of sciences talking about how you take

1107

00:45:49,060 --> 00:45:47,780

stories to programs like catalyst then I

1108

00:45:50,950 --> 00:45:49,070

went off to Brisbane where I pulled

1109

00:45:53,590 --> 00:45:50,960

apart a duck looking for the insert for

1110

00:45:56,740 --> 00:45:53,600

the dinosaur inside and I came here over

1111

00:45:58,630 --> 00:45:56,750

here to Sydney and I've been doing a

1112

00:46:00,400 --> 00:45:58,640

number of things here including some

1113

00:46:04,090 --> 00:46:00,410

work with the BBC you must be exhausted

1114

00:46:06,100 --> 00:46:04,100

I am I'm completely knackered but look

1115

00:46:07,720 --> 00:46:06,110

it's all part of the job another under

1116

00:46:10,120 --> 00:46:07,730

Ector at the Royal Institution there in

1117

00:46:11,890 --> 00:46:10,130

Adelaide my job is to get out and spruik

1118

00:46:13,300 --> 00:46:11,900

science around the country now what are

1119

00:46:16,000 --> 00:46:13,310

you doing with the BBC everyone's going

1120

00:46:17,680 --> 00:46:16,010

all hang on what does the undo okay that

1121

00:46:19,990 --> 00:46:17,690

wasn't a neat one to drop in there on

1122

00:46:22,440 --> 00:46:20,000

there look the BBC are actually putting

1123

00:46:25,900 --> 00:46:22,450

together a walking with dinosaurs

1124

00:46:27,760 --> 00:46:25,910

experience that'll to around the

1125

00:46:30,730 --> 00:46:27,770

shopping centers of I think it's

1126  
00:46:32,410 --> 00:46:30,740  
Westfield and it's a case for you know

1127  
00:46:33,940 --> 00:46:32,420  
you can bring the kids along and they

1128  
00:46:36,070 --> 00:46:33,950  
can actually go and dig up some dinosaur

1129  
00:46:37,780 --> 00:46:36,080  
bones cuz kids love dinosaurs course

1130  
00:46:39,370 --> 00:46:37,790  
they love dinosaur and so do you you've

1131  
00:46:41,020 --> 00:46:39,380  
done a bit of a pallet of it you've done

1132  
00:46:43,000 --> 00:46:41,030  
some paleontology digging heaven heaven

1133  
00:46:44,860 --> 00:46:43,010  
d actually I found a dinosaur recently

1134  
00:46:46,300 --> 00:46:44,870  
in Canberra but that's another story so

1135  
00:46:48,850 --> 00:46:46,310  
long story you can pick up on the side

1136  
00:46:52,000 --> 00:46:48,860  
show but anyway so we did this thing

1137  
00:46:53,980 --> 00:46:52,010  
with the with the BBC and that'll be

1138  
00:46:55,200 --> 00:46:53,990

going out across the country shopping

1139

00:46:56,760 --> 00:46:55,210

center near you

1140

00:46:59,849 --> 00:46:56,770

they have walking with dinosaurs on ice

1141

00:47:01,380 --> 00:46:59,859

with in recent memory yes they did I

1142

00:47:03,599 --> 00:47:01,390

don't know about on ice they did have a

1143

00:47:06,540 --> 00:47:03,609

stage oh yeah it was really well done

1144

00:47:09,570 --> 00:47:06,550

actually you know because it's it's not

1145

00:47:12,390 --> 00:47:09,580

easy operating you know a 13 meets a

1146

00:47:14,700 --> 00:47:12,400

long puppet of a dinosaur and it's

1147

00:47:18,000 --> 00:47:14,710

getting kids away from something else

1148

00:47:19,770 --> 00:47:18,010

that's not science yeah look the filling

1149

00:47:21,660 --> 00:47:19,780

them away from the mcdonalds ads between

1150

00:47:24,329 --> 00:47:21,670

the show the thing with dinosaurs but

1151  
00:47:26,700 --> 00:47:24,339  
also with astronomy and Egyptology is

1152  
00:47:28,829 --> 00:47:26,710  
for a lot of kids it's their first

1153  
00:47:30,870 --> 00:47:28,839  
experience of science it's their first

1154  
00:47:33,210 --> 00:47:30,880  
experience of abstract thinking I've

1155  
00:47:35,670 --> 00:47:33,220  
come across kids who can't spell our own

1156  
00:47:38,070 --> 00:47:35,680  
name but I can spell Tyrannosaurus kids

1157  
00:47:41,579 --> 00:47:38,080  
who aren't even sure why they're alive

1158  
00:47:44,280 --> 00:47:41,589  
but they come to terms of the idea of

1159  
00:47:47,099 --> 00:47:44,290  
extinction or things that lived before I

1160  
00:47:50,000 --> 00:47:47,109  
was alive and you only think about it

1161  
00:47:52,920 --> 00:47:50,010  
they're powerful ideas to play with and

1162  
00:47:54,690 --> 00:47:52,930  
it's something about dinosaurs astronomy

1163  
00:47:57,770 --> 00:47:54,700

in Egyptology that captured kids

1164

00:48:00,510 --> 00:47:57,780

imagination and once you've got that it

1165

00:48:02,730 --> 00:48:00,520

wonderful wonderful teaching tools you

1166

00:48:05,460 --> 00:48:02,740

can see to anything you know 22

1167

00:48:08,280 --> 00:48:05,470

Tyrannosaurus is plus 3 brontosaurus

1168

00:48:11,010 --> 00:48:08,290

will equal there's a lot more fun than 2

1169

00:48:12,839 --> 00:48:11,020

plus 3 equals what now you do a number

1170

00:48:14,280 --> 00:48:12,849

of outreach education projects you've

1171

00:48:15,599 --> 00:48:14,290

got the podcast which will tell us about

1172

00:48:17,280 --> 00:48:15,609

in the moment and of course you have the

1173

00:48:19,200 --> 00:48:17,290

weekly on the skeptic zone have a weekly

1174

00:48:21,900 --> 00:48:19,210

catch up with what you're up to yeah

1175

00:48:24,300 --> 00:48:21,910

that's that that's actually the podcast

1176

00:48:28,589 --> 00:48:24,310

we did we do we put the sound on the

1177

00:48:31,859 --> 00:48:28,599

podcast and it's a succinct easy to

1178

00:48:33,930 --> 00:48:31,869

digest summary of the news in science

1179

00:48:35,670 --> 00:48:33,940

for that week if you want more we've got

1180

00:48:38,040 --> 00:48:35,680

more on the website so that you know you

1181

00:48:40,349 --> 00:48:38,050

can go dig a bit deeper but we just have

1182

00:48:42,839 --> 00:48:40,359

fun putting up about a dozen of the best

1183

00:48:44,670 --> 00:48:42,849

science stories from the week and we do

1184

00:48:47,190 --> 00:48:44,680

put it out as a vodcast as well as a

1185

00:48:48,930 --> 00:48:47,200

podcast so that you can actually sit

1186

00:48:50,250 --> 00:48:48,940

there on the bus on you I home on a

1187

00:48:52,800 --> 00:48:50,260

Friday night and if you've got three and

1188

00:48:54,450 --> 00:48:52,810

a half minutes you can watch the news in

1189

00:48:55,950 --> 00:48:54,460

science for that week I mean how could

1190

00:48:57,300 --> 00:48:55,960

that it's gotta leave the clips and

1191

00:48:58,829 --> 00:48:57,310

things being played yeah we've got all

1192

00:49:00,000 --> 00:48:58,839

the clips and all the visuals and all

1193

00:49:01,590 --> 00:49:00,010

that yeah now what

1194

00:49:03,480 --> 00:49:01,600

I want to ask you about is this is good

1195

00:49:05,820 --> 00:49:03,490

science education but what about a push

1196

00:49:08,130 --> 00:49:05,830

back against the pseudoscience what

1197

00:49:10,770 --> 00:49:08,140

about a show that not so much debunking

1198

00:49:12,720 --> 00:49:10,780

but has likely the the will of the week

1199

00:49:13,830 --> 00:49:12,730

or something like that and that but is

1200

00:49:15,150 --> 00:49:13,840

that beyond what you should be doing

1201  
00:49:16,350 --> 00:49:15,160  
well you just want to educate people

1202  
00:49:18,630 --> 00:49:16,360  
with the science and leave that to

1203  
00:49:20,310 --> 00:49:18,640  
someone else this takes me back to the

1204  
00:49:22,590 --> 00:49:20,320  
days of the cracks files remember them

1205  
00:49:25,320 --> 00:49:22,600  
on triple j this this was this is my

1206  
00:49:27,570 --> 00:49:25,330  
first radio program on triple j now with

1207  
00:49:30,090 --> 00:49:27,580  
his precalc cruising is key I know

1208  
00:49:32,400 --> 00:49:30,100  
Cole's there but I had the cracks files

1209  
00:49:35,250 --> 00:49:32,410  
they're from I think was nineteen

1210  
00:49:36,900 --> 00:49:35,260  
ninety-seven through to 999 and we

1211  
00:49:38,640 --> 00:49:36,910  
looked at all kinds of Wu and

1212  
00:49:42,510 --> 00:49:38,650  
pseudoscience and they're still there on

1213  
00:49:46,110 --> 00:49:42,520

the on the internet cor re X on the ABC

1214

00:49:47,340 --> 00:49:46,120

science website and yeah we tackled

1215

00:49:51,300 --> 00:49:47,350

everything and had a lot of fun with

1216

00:49:53,760 --> 00:49:51,310

that but you look I moved on to other

1217

00:49:54,930 --> 00:49:53,770

things and so you think it's more

1218

00:49:56,880 --> 00:49:54,940

important to put the right information

1219

00:49:58,710 --> 00:49:56,890

out there and lead that sort of thing to

1220

00:50:01,380 --> 00:49:58,720

other people because it's better to get

1221

00:50:03,900 --> 00:50:01,390

what you do right first yeah look that

1222

00:50:08,520 --> 00:50:03,910

there is so much to be done as an mo you

1223

00:50:11,120 --> 00:50:08,530

know and I think that our our stick is

1224

00:50:14,670 --> 00:50:11,130

just to put out the good stuff you know

1225

00:50:16,860 --> 00:50:14,680

rather than get into brawls I mean every

1226

00:50:18,450 --> 00:50:16,870

so often will get dragged into climate

1227

00:50:22,800 --> 00:50:18,460

change denial or something like that

1228

00:50:25,140 --> 00:50:22,810

because we don't as an institution we

1229

00:50:28,290 --> 00:50:25,150

don't have a position on any anything we

1230

00:50:30,690 --> 00:50:28,300

are not pro climate debate or climate

1231

00:50:34,050 --> 00:50:30,700

change or what we're not pro-nuclear

1232

00:50:36,240 --> 00:50:34,060

we're not pro or anti GMO or anything we

1233

00:50:38,820 --> 00:50:36,250

don't have any positions what we do is

1234

00:50:40,410 --> 00:50:38,830

we present the science this is the

1235

00:50:43,230 --> 00:50:40,420

science this is what the science says

1236

00:50:45,540 --> 00:50:43,240

this is how many people in science who

1237

00:50:47,760 --> 00:50:45,550

actually study the stuff say climate

1238

00:50:50,430 --> 00:50:47,770

change is real this is how many people

1239

00:50:52,950 --> 00:50:50,440

say that it is not real you know and

1240

00:50:55,410 --> 00:50:52,960

when you actually lay it out like that

1241

00:50:57,540 --> 00:50:55,420

then the public can see that well

1242

00:51:00,510 --> 00:50:57,550

there's not much debate about something

1243

00:51:01,860 --> 00:51:00,520

like climate change you know that the

1244

00:51:04,440 --> 00:51:01,870

Lord the paper came out the other day

1245

00:51:06,900 --> 00:51:04,450

ninety-seven percent of papers that deal

1246

00:51:08,700 --> 00:51:06,910

with climate change agree that the

1247

00:51:12,140 --> 00:51:08,710

climate change the climate is changing

1248

00:51:14,180 --> 00:51:12,150

and it's human induced well if you

1249

00:51:15,950 --> 00:51:14,190

just lay that out and put it before

1250

00:51:18,410 --> 00:51:15,960

people so they can make up their own

1251  
00:51:20,870 --> 00:51:18,420  
minds I think that's the best we can do

1252  
00:51:21,829 --> 00:51:20,880  
and then that problem comes because

1253  
00:51:23,569 --> 00:51:21,839  
you've got to figure out what to do

1254  
00:51:25,700 --> 00:51:23,579  
about it that removes into the realm of

1255  
00:51:27,140 --> 00:51:25,710  
political science which because it's got

1256  
00:51:30,650 --> 00:51:27,150  
science at the end of it means it's not

1257  
00:51:33,740 --> 00:51:30,660  
yeah yeah well you know I think that we

1258  
00:51:36,349 --> 00:51:33,750  
need to appreciate your like biggest

1259  
00:51:39,019 --> 00:51:36,359  
pushing them in my job it's not so much

1260  
00:51:40,910 --> 00:51:39,029  
to raise science literacy not I don't

1261  
00:51:43,160 --> 00:51:40,920  
want to make everyone an Einstein in

1262  
00:51:46,130 --> 00:51:43,170  
this country but i do want everyone to

1263  
00:51:49,279 --> 00:51:46,140

respect science science has got a lot to

1264

00:51:52,010 --> 00:51:49,289

offer we know that science is a special

1265

00:51:54,500 --> 00:51:52,020

quality of information and we want to

1266

00:51:56,900 --> 00:51:54,510

get that respect back for it and i use

1267

00:51:58,339 --> 00:51:56,910

the analogy you know in this country you

1268

00:52:01,250 --> 00:51:58,349

only succeed if you've got a sporting

1269

00:52:03,079 --> 00:52:01,260

analogy now let's face it there are a

1270

00:52:05,450 --> 00:52:03,089

lot of people out there who barrack for

1271

00:52:07,220 --> 00:52:05,460

football teams who would never bother

1272

00:52:10,190 --> 00:52:07,230

actually pulling on the boots and play

1273

00:52:11,720 --> 00:52:10,200

football if they respect the game yeah

1274

00:52:13,549 --> 00:52:11,730

and that's all we're asking about

1275

00:52:16,130 --> 00:52:13,559

science we're not asking people to

1276  
00:52:17,839 --> 00:52:16,140  
become you know did you say we lost is

1277  
00:52:19,609 --> 00:52:17,849  
it some stage you think it was greater

1278  
00:52:21,440 --> 00:52:19,619  
in the past and it lasted at some

1279  
00:52:23,569 --> 00:52:21,450  
staging we ever had it I already don't

1280  
00:52:25,640 --> 00:52:23,579  
think we ever had it but how do we get

1281  
00:52:28,549 --> 00:52:25,650  
that sounds respect out there and I

1282  
00:52:29,779 --> 00:52:28,559  
think it's simply by let's just let's

1283  
00:52:32,059 --> 00:52:29,789  
just show you some of the clever stuff

1284  
00:52:33,769 --> 00:52:32,069  
they don't let me show you some of the

1285  
00:52:35,359 --> 00:52:33,779  
impressive plays that the teams are

1286  
00:52:37,700 --> 00:52:35,369  
putting out there on the field now what

1287  
00:52:38,779 --> 00:52:37,710  
is the scientific breakthrough recently

1288  
00:52:40,160 --> 00:52:38,789

that's blown your mind a bit of

1289

00:52:41,750 --> 00:52:40,170

information that's come through your new

1290

00:52:43,339 --> 00:52:41,760

show where you've gone well Fisk me I

1291

00:52:47,599 --> 00:52:43,349

can't believe that well the one that the

1292

00:52:52,010 --> 00:52:47,609

one that I love because my area is

1293

00:52:54,620 --> 00:52:52,020

paleontology just last week we found a

1294

00:52:55,700 --> 00:52:54,630

dinosaur bird one of these these I

1295

00:52:57,710 --> 00:52:55,710

thought you go you're gonna go the

1296

00:52:59,539 --> 00:52:57,720

mammoth that they actually bled the

1297

00:53:01,970 --> 00:52:59,549

blood as now you can carbon-date that

1298

00:53:05,390 --> 00:53:01,980

that's not even a bloody fossil and but

1299

00:53:07,779 --> 00:53:05,400

but but the thing is is that what's so

1300

00:53:12,440 --> 00:53:07,789

cute about this it's a called or honest

1301  
00:53:14,870 --> 00:53:12,450  
and it comes from China is that you get

1302  
00:53:17,359 --> 00:53:14,880  
those dunderheads in creationism that

1303  
00:53:18,470 --> 00:53:17,369  
are saying well evolution can't be a

1304  
00:53:20,599 --> 00:53:18,480  
science because you can't make

1305  
00:53:22,800 --> 00:53:20,609  
predictions and that's complete

1306  
00:53:24,930 --> 00:53:22,810  
because we predicted this bird would be

1307  
00:53:26,850 --> 00:53:24,940  
we predicted what it would be like we

1308  
00:53:29,520 --> 00:53:26,860  
predicted how old it would be we

1309  
00:53:31,350 --> 00:53:29,530  
predicted features of its skeleton down

1310  
00:53:33,120 --> 00:53:31,360  
to the nth degree what would be that and

1311  
00:53:35,700 --> 00:53:33,130  
guess what we found that it was all

1312  
00:53:39,810 --> 00:53:35,710  
there it turned up so you know it just

1313  
00:53:42,060 --> 00:53:39,820

to me was so sweet that in one beautiful

1314

00:53:45,600 --> 00:53:42,070

fossil specimen we were able to show

1315

00:53:48,690 --> 00:53:45,610

yeah evolution evolutionary biology it

1316

00:53:50,550 --> 00:53:48,700

is a science you do make predictions you

1317

00:53:53,280 --> 00:53:50,560

can go out and confirm those predictions

1318

00:53:55,320 --> 00:53:53,290

you can back your theories up just like

1319

00:53:56,550 --> 00:53:55,330

any other science in the world of whoo

1320

00:53:58,350 --> 00:53:56,560

and I've asked a lot of people this have

1321

00:54:00,450 --> 00:53:58,360

even asked James around e if there was

1322

00:54:02,790 --> 00:54:00,460

one woo one shooter science one

1323

00:54:04,740 --> 00:54:02,800

conspiracy theory one thing that was

1324

00:54:06,090 --> 00:54:04,750

real is it when you wish was real as

1325

00:54:09,300 --> 00:54:06,100

they want gee that'd be good if that was

1326

00:54:11,820 --> 00:54:09,310

real I would like the Midas touch whoa

1327

00:54:14,220 --> 00:54:11,830

you know that would be that would be the

1328

00:54:15,690 --> 00:54:14,230

one heart one you know even figuratively

1329

00:54:17,490 --> 00:54:15,700

to be able to walk into a bar and know

1330

00:54:18,720 --> 00:54:17,500

that seventy-five percent of what you

1331

00:54:21,690 --> 00:54:18,730

say was going to be correct would be

1332

00:54:23,250 --> 00:54:21,700

great wouldn't it yo man I want that you

1333

00:54:25,770 --> 00:54:23,260

know everything you touch turns to gold

1334

00:54:27,360 --> 00:54:25,780

you know because that it would make

1335

00:54:29,550 --> 00:54:27,370

going to the toilet somewhat of an

1336

00:54:32,160 --> 00:54:29,560

experienced anything to do with that but

1337

00:54:34,560 --> 00:54:32,170

but you know I mean the idea that you

1338

00:54:35,790 --> 00:54:34,570

could just okay own picture money all

1339

00:54:37,860 --> 00:54:35,800

right I'll just touch this app awake

1340

00:54:40,860 --> 00:54:37,870

golden apple anyone would buy an apple

1341

00:54:42,300 --> 00:54:40,870

made of gold DNE ok maybe you just need

1342

00:54:44,820 --> 00:54:42,310

something maybe need to any bit lower

1343

00:54:48,060 --> 00:54:44,830

maybe the ATM touches all you need the

1344

00:54:49,710 --> 00:54:48,070

ATM and to retro go be more than two

1345

00:54:51,060 --> 00:54:49,720

retro huh well thanks for joining us

1346

00:54:52,830 --> 00:54:51,070

here tonight and having a lot of fun and

1347

00:54:54,960 --> 00:54:52,840

please everyone come along the first

1348

00:54:57,660 --> 00:54:54,970

thursday next month it's upstairs at the

1349

00:54:59,520 --> 00:54:57,670

the coronation hotel in the mezz bar it

1350

00:55:00,840 --> 00:54:59,530

is and it's been great to have you have

1351  
00:55:02,700 --> 00:55:00,850  
a great journey back to south australia

1352  
00:55:04,770 --> 00:55:02,710  
house how is Adelaide rocking at the

1353  
00:55:07,680 --> 00:55:04,780  
moment I had some of the best sex of my

1354  
00:55:09,810 --> 00:55:07,690  
life in North Adelaide north adelaide is

1355  
00:55:11,280 --> 00:55:09,820  
just a wild spot is it still the same is

1356  
00:55:13,800 --> 00:55:11,290  
that chip shop where the guy says g'day

1357  
00:55:16,320 --> 00:55:13,810  
boss still there Adelaide is a fantastic

1358  
00:55:18,120 --> 00:55:16,330  
place to be I love it there and they all

1359  
00:55:20,760 --> 00:55:18,130  
you need to know about Adelaide is that

1360  
00:55:22,080 --> 00:55:20,770  
within an hour of my front door a 300 of

1361  
00:55:23,460 --> 00:55:22,090  
the best seller doors on the planet

1362  
00:55:24,990 --> 00:55:23,470  
that's right and and of course your

1363  
00:55:26,940 --> 00:55:25,000

irregular that maslin's I believe

1364

00:55:29,460 --> 00:55:26,950  
as well ah yeah but that that one

1365

00:55:32,400 --> 00:55:29,470  
remains in the vault I'm afraid

1366

00:55:35,190 --> 00:55:32,410  
right the to come back soon will do look

1367

00:55:38,130 --> 00:55:35,200  
we hear it skeptics at the pub tonight

1368

00:55:39,930 --> 00:55:38,140  
I'm trying out a new haircut I was going

1369

00:55:41,880 --> 00:55:39,940  
for the car mcglaughlin haircut but it's

1370

00:55:43,080 --> 00:55:41,890  
gone horribly wrong I think we're going

1371

00:55:45,690 --> 00:55:43,090  
to be experimenting a lot with my

1372

00:55:48,180 --> 00:55:45,700  
haircut but let me tell you here there

1373

00:55:49,589 --> 00:55:48,190  
are people hushed as I week the question

1374

00:55:51,540 --> 00:55:49,599  
for the evening which has been put to us

1375

00:55:53,099 --> 00:55:51,550  
by Sir Paul Willis he was knighted

1376

00:55:54,359 --> 00:55:53,109

briefly during the evening I don't know

1377

00:55:57,660 --> 00:55:54,369

if it's official but I'm going to go

1378

00:55:59,849 --> 00:55:57,670

with it when is enough enough in the

1379

00:56:01,410 --> 00:55:59,859

skeptic trade when should we call it a

1380

00:56:02,760 --> 00:56:01,420

day over something or actually Richard

1381

00:56:05,070 --> 00:56:02,770

how would you put it you is it when

1382

00:56:06,780 --> 00:56:05,080

should we stop pursuing anti-vaccination

1383

00:56:09,150 --> 00:56:06,790

people and that sort of thing when

1384

00:56:11,250 --> 00:56:09,160

should we stop water divining and what

1385

00:56:12,720 --> 00:56:11,260

is the stopping point where okay that

1386

00:56:13,859 --> 00:56:12,730

one's done we'll move on is that what

1387

00:56:16,560 --> 00:56:13,869

you want me to ask yeah it's a good

1388

00:56:18,810 --> 00:56:16,570

question because it's like we don't

1389

00:56:21,060 --> 00:56:18,820

chase pixies and fairies because

1390

00:56:23,250 --> 00:56:21,070

everybody knows that's that's mythology

1391

00:56:26,460 --> 00:56:23,260

so when it comes to something like water

1392

00:56:29,040 --> 00:56:26,470

divining or yeah even the and Eve axes

1393

00:56:31,800 --> 00:56:29,050

when do we say not it's been dealt with

1394

00:56:34,109 --> 00:56:31,810

that's enough I don't think there's a

1395

00:56:36,180 --> 00:56:34,119

good answer to that question yeah look I

1396

00:56:37,740 --> 00:56:36,190

think a lot of people pretty those with

1397

00:56:39,690 --> 00:56:37,750

children will say as long as children

1398

00:56:41,609 --> 00:56:39,700

our risk and it runs definition of why

1399

00:56:43,440 --> 00:56:41,619

how the children may be at risk could be

1400

00:56:45,030 --> 00:56:43,450

any false information being out there

1401  
00:56:46,500 --> 00:56:45,040  
whatsoever that could be some people so

1402  
00:56:49,470 --> 00:56:46,510  
and some people's mind the battle would

1403  
00:56:51,720 --> 00:56:49,480  
never be over yeah that's true now

1404  
00:56:53,490 --> 00:56:51,730  
anti-vaxxers and water divining a pretty

1405  
00:56:55,710 --> 00:56:53,500  
different very different very very

1406  
00:56:56,880 --> 00:56:55,720  
different things but would there are

1407  
00:56:58,440 --> 00:56:56,890  
still lots of people out there who

1408  
00:57:00,329 --> 00:56:58,450  
claimed more than the vinings real now

1409  
00:57:05,570 --> 00:57:00,339  
you can say the h'harn about that is not

1410  
00:57:10,160 --> 00:57:05,580  
so great one day I think it's like the

1411  
00:57:11,630 --> 00:57:10,170  
years ago the smoking question see some

1412  
00:57:13,460 --> 00:57:11,640  
people are skeptical they reckon that

1413  
00:57:15,320 --> 00:57:13,470

smoking causes harm how are those silly

1414

00:57:17,990 --> 00:57:15,330

people well now we all accept that

1415

00:57:19,550 --> 00:57:18,000

smoking causes harm oh yeah but you

1416

00:57:21,530 --> 00:57:19,560

still haven't owned up to the great

1417

00:57:23,960 --> 00:57:21,540

fluoride conspiracy at Richard you are

1418

00:57:25,910 --> 00:57:23,970

still putting that bat sting from the

1419

00:57:29,210 --> 00:57:25,920

periodic table into the water we are

1420

00:57:31,340 --> 00:57:29,220

with glee we may not I like your haircut

1421

00:57:33,170 --> 00:57:31,350

by the way I thank you it should be

1422

00:57:34,580 --> 00:57:33,180

fairly controversial but it probably

1423

00:57:36,500 --> 00:57:34,590

won't be now I see that mikhay is

1424

00:57:38,090 --> 00:57:36,510

actually voted to have the fluoride back

1425

00:57:40,190 --> 00:57:38,100

in their water actually oh and some

1426  
00:57:41,480 --> 00:57:40,200  
breaking news I have noticed say i read

1427  
00:57:45,440 --> 00:57:41,490  
that today it's going back in the water

1428  
00:57:46,700 --> 00:57:45,450  
today a win a win for us all exactly how

1429  
00:57:48,740 --> 00:57:46,710  
and why it's going back in but it's

1430  
00:57:50,420 --> 00:57:48,750  
going back in all right yeah well I'm

1431  
00:57:52,850 --> 00:57:50,430  
good for them but getting back to the

1432  
00:57:55,040 --> 00:57:52,860  
question like a ghost and what stays to

1433  
00:57:56,360 --> 00:57:55,050  
the skeptics eight you look come on you

1434  
00:57:59,180 --> 00:57:56,370  
know we've we've been there we've

1435  
00:58:01,400 --> 00:57:59,190  
investigated I guess as long as people

1436  
00:58:02,540 --> 00:58:01,410  
are still making the claim okay how

1437  
00:58:03,980 --> 00:58:02,550  
about I asked a few people and see what

1438  
00:58:05,870 --> 00:58:03,990

they think here tonight let's do it and

1439

00:58:07,820 --> 00:58:05,880

don't forget it's a first thursday of

1440

00:58:09,620 --> 00:58:07,830

every month upstairs at the coronation

1441

00:58:11,180 --> 00:58:09,630

hotel and it's it's pretty packed and

1442

00:58:13,340 --> 00:58:11,190

i'm at about 80 people here tonight it's

1443

00:58:15,260 --> 00:58:13,350

good start we'll go straight to the man

1444

00:58:17,750 --> 00:58:15,270

who had the longest question i've heard

1445

00:58:20,240 --> 00:58:17,760

out of skeptical we got here Oh Gary

1446

00:58:21,770 --> 00:58:20,250

Gary Dalrymple now you asked a question

1447

00:58:24,200 --> 00:58:21,780

about our our spokesman about

1448

00:58:26,210 --> 00:58:24,210

conspiracies tonight but what do the

1449

00:58:28,070 --> 00:58:26,220

question were asking is when is enough

1450

00:58:30,020 --> 00:58:28,080

enough with the skeptics movement on

1451

00:58:32,300 --> 00:58:30,030

certain issues such as water divining

1452

00:58:34,040 --> 00:58:32,310

even anti-vaccination when should you

1453

00:58:35,570 --> 00:58:34,050

care okay with one we should move on to

1454

00:58:37,010 --> 00:58:35,580

something else do you what point should

1455

00:58:39,569 --> 00:58:37,020

that be

1456

00:58:41,400 --> 00:58:39,579

probably when the last Daily Telegraph

1457

00:58:44,220 --> 00:58:41,410

journalist chokes on their own is

1458

00:58:46,380 --> 00:58:44,230

hanging by their own entrails and the

1459

00:58:48,900 --> 00:58:46,390

last conspiracy website sort of self

1460

00:58:51,120 --> 00:58:48,910

implodes what going to be out for quite

1461

00:58:54,660 --> 00:58:51,130

a while then well there is a tremendous

1462

00:58:55,740 --> 00:58:54,670

Gulf of credibility to be traversed look

1463

00:58:58,650 --> 00:58:55,750

actually the question we're asking

1464

00:59:00,660 --> 00:58:58,660

people tonight jovi knew his um when is

1465

00:59:02,430 --> 00:59:00,670

enough enough when should skeptic stop

1466

00:59:03,720 --> 00:59:02,440

on a certain topic and move to another

1467

00:59:04,980 --> 00:59:03,730

one how do you know when enough is

1468

00:59:07,020 --> 00:59:04,990

enough and you've gone to one the issue

1469

00:59:10,220 --> 00:59:07,030

and it's time to stop such as water

1470

00:59:12,809 --> 00:59:10,230

divining even anti-vaccination anything

1471

00:59:15,210 --> 00:59:12,819

well I mean I think we've kind of

1472

00:59:16,470 --> 00:59:15,220

established that these are all you know

1473

00:59:19,500 --> 00:59:16,480

as we like to say they're unsinkable

1474

00:59:22,530 --> 00:59:19,510

rubber ducks so I don't think we can

1475

00:59:24,750 --> 00:59:22,540

ever stop because they keep coming up

1476

00:59:27,109 --> 00:59:24,760

over and over again so i don't know

1477

00:59:30,960 --> 00:59:27,119

maybe maybe we need to focus less on the

1478

00:59:33,900 --> 00:59:30,970

specific topics and more on helping

1479

00:59:37,500 --> 00:59:33,910

people develop the skills broadly to

1480

00:59:39,359 --> 00:59:37,510

recognize the floors rather than taking

1481

00:59:41,010 --> 00:59:39,369

on each individual thing but at the same

1482

00:59:42,809 --> 00:59:41,020

time there's enough of us that are

1483

00:59:44,700 --> 00:59:42,819

experts in all these other areas that if

1484

00:59:47,609 --> 00:59:44,710

we could push the expert expert in that

1485

00:59:49,819 --> 00:59:47,619

direction and rather than kind of all

1486

00:59:51,690 --> 00:59:49,829

feeling we have to focus on one thing

1487

00:59:53,130 --> 00:59:51,700

that could be one way of getting around

1488

00:59:54,750 --> 00:59:53,140

it but i think it's time we moved on to

1489

00:59:56,370 --> 00:59:54,760

hologram theory how many times do i have

1490

00:59:57,960 --> 00:59:56,380

to tell you I'm big on this we're all

1491

00:59:59,970 --> 00:59:57,970

three dimensional projections of a

1492

01:00:02,339 --> 00:59:59,980

two-dimensional projection object that

1493

01:00:03,599 --> 01:00:02,349

we can't see that's what we are when are

1494

01:00:05,700 --> 01:00:03,609

we going to move on to that nate is

1495

01:00:07,200 --> 01:00:05,710

blowing my mind look the physics

1496

01:00:09,390 --> 01:00:07,210

supported I saw it on her eyes on one

1497

01:00:10,770 --> 01:00:09,400

night at nine o'clock can I go back to

1498

01:00:12,839 --> 01:00:10,780

your original question I think you

1499

01:00:15,059 --> 01:00:12,849

better first of all absolutely hologram

1500

01:00:19,079 --> 01:00:15,069

theory I completely support it

1501

01:00:22,199 --> 01:00:19,089

I have evidence to support it in my

1502

01:00:25,229 --> 01:00:22,209

fridge now the question to the question

1503

01:00:27,569 --> 01:00:25,239

about whether when we should stop well

1504

01:00:29,219 --> 01:00:27,579

I'd say I've taken away from what Joe

1505

01:00:31,019 --> 01:00:29,229

said about in principle when should the

1506

01:00:32,489 --> 01:00:31,029

skeptics it in general stop and I'll say

1507

01:00:34,859 --> 01:00:32,499

when when you stop on a personal level

1508

01:00:37,229 --> 01:00:34,869

so on a personal level when you stop

1509

01:00:38,969 --> 01:00:37,239

having fun okay so when you speak to

1510

01:00:42,120 --> 01:00:38,979

somebody and he just gets a bit boring

1511

01:00:44,219 --> 01:00:42,130

and tedious that's definitely when you

1512

01:00:46,140 --> 01:00:44,229

should stop and alternative reason to

1513

01:00:47,999 --> 01:00:46,150

stop is when you realize that you

1514

01:00:49,620 --> 01:00:48,009

speaking to a true believer meaning

1515

01:00:51,689 --> 01:00:49,630

you're never gonna get you going to

1516

01:00:53,370 --> 01:00:51,699

convince that person and nobody else is

1517

01:00:57,109 --> 01:00:53,380

listening so there's no real audience

1518

01:00:59,219 --> 01:00:57,119

for that's a good time to say gotta go

1519

01:01:00,809 --> 01:00:59,229

which is why which is why when you're

1520

01:01:03,089 --> 01:01:00,819

when you're dealing with stuff online in

1521

01:01:04,559 --> 01:01:03,099

a public forum you might have the true

1522

01:01:05,789 --> 01:01:04,569

believer on the other end who's never

1523

01:01:07,229 --> 01:01:05,799

going to listen to you but you've got to

1524

01:01:08,699 --> 01:01:07,239

remember how do you know when to get off

1525

01:01:11,130 --> 01:01:08,709

the forum how do you know when to leave

1526

01:01:13,380 --> 01:01:11,140

it look I just I just think it gets to a

1527

01:01:16,680 --> 01:01:13,390

point where if you're copping a lot of

1528

01:01:18,749 --> 01:01:16,690

abuse and you really are not getting it

1529

01:01:20,699 --> 01:01:18,759

I think I think in a forum for example

1530

01:01:22,380 --> 01:01:20,709

if there's no one who's asking you a

1531

01:01:24,089 --> 01:01:22,390

question that suggests that they're

1532

01:01:26,370 --> 01:01:24,099

willing to listen or that they're

1533

01:01:27,870 --> 01:01:26,380

interested or sort of saying well hang

1534

01:01:29,489 --> 01:01:27,880

on a second I hadn't considered that or

1535

01:01:31,829 --> 01:01:29,499

something like that then maybe it's time

1536

01:01:34,079 --> 01:01:31,839

to just kind of walk away and take it

1537

01:01:35,819 --> 01:01:34,089

off at another time well it also around

1538

01:01:37,380 --> 01:01:35,829

the table here we've got the editor of

1539

01:01:39,120 --> 01:01:37,390

the skeptic magazine how are you I

1540

01:01:40,709 --> 01:01:39,130

really well thank you moment and what's

1541

01:01:42,359 --> 01:01:40,719

coming up the next issue by the way I

1542

01:01:44,099 --> 01:01:42,369

think of a lot of stuff about conspiracy

1543

01:01:45,989 --> 01:01:44,109

theories actually all right now what's

1544

01:01:49,890 --> 01:01:45,999

your favorite I favorite conspiracy yeah

1545

01:01:52,319 --> 01:01:49,900

yeah my big conspiracy was I once

1546

01:01:54,089 --> 01:01:52,329

actually went to Loch Ness oh you loved

1547

01:01:56,239 --> 01:01:54,099

it I loved Loch Ness and by side of the

1548

01:01:58,620 --> 01:01:56,249

road there was a one of those mobile

1549

01:02:00,870 --> 01:01:58,630

food stores take away food stores they

1550

01:02:03,299 --> 01:02:00,880

have in the UK all the time and this one

1551

01:02:05,189 --> 01:02:03,309

was for selling monster burgers so

1552

01:02:06,520 --> 01:02:05,199

that's my conspiracy they use fee

1553

01:02:08,500 --> 01:02:06,530

monsters in

1554

01:02:10,690 --> 01:02:08,510

more than any more they sold them oh sad

1555

01:02:12,610 --> 01:02:10,700

actually and when you think enough is

1556

01:02:14,590 --> 01:02:12,620

enough in the skeptical world as far as

1557

01:02:16,150 --> 01:02:14,600

arguing with someone and also an issue

1558

01:02:18,070 --> 01:02:16,160

like when should you drop an issue cos

1559

01:02:20,710 --> 01:02:18,080

the Australian skeptics a bit doing like

1560

01:02:22,660 --> 01:02:20,720

water diviners for years now so you know

1561

01:02:23,560 --> 01:02:22,670

is that time to give it a while though

1562

01:02:25,810 --> 01:02:23,570

there's still plenty of people to

1563

01:02:27,400 --> 01:02:25,820

believe in it actually the vast majority

1564

01:02:28,810 --> 01:02:27,410

of people who go for the challenge

1565

01:02:30,760 --> 01:02:28,820

hundred thousand little challenge our

1566

01:02:32,080 --> 01:02:30,770

water diviners I think everyone agrees

1567

01:02:33,520 --> 01:02:32,090

they're virtually all the waters of

1568

01:02:36,010 --> 01:02:33,530

Anna's we see a pretty genuine people

1569

01:02:38,440 --> 01:02:36,020

they really believe they can do it if we

1570

01:02:41,200 --> 01:02:38,450

don't say they're not xiang's well they

1571

01:02:43,420 --> 01:02:41,210

don't believe they shanks ya see the

1572

01:02:45,520 --> 01:02:43,430

other thing is set up ya know personally

1573

01:02:47,530 --> 01:02:45,530

you find yourself occasionally when you

1574

01:02:49,480 --> 01:02:47,540

find yourself sort of mouthing the same

1575

01:02:50,740 --> 01:02:49,490

stuff you've said a lot of times it's

1576

01:02:52,090 --> 01:02:50,750

like it's trying to pull out and then

1577

01:02:54,250 --> 01:02:52,100

for a while I did that actually was a

1578

01:02:56,530 --> 01:02:54,260

cadet reason you got to refresh yourself

1579

01:02:58,600 --> 01:02:56,540

and and yeah reinvigorate your self and

1580

01:02:59,950 --> 01:02:58,610

re involved yourself when you're talking

1581

01:03:04,720 --> 01:02:59,960

to someone else who just is not

1582

01:03:08,410 --> 01:03:04,730

listening my cannon see now is to go

1583

01:03:10,240 --> 01:03:08,420

quiet and then hip coming I was seeing

1584

01:03:12,190 --> 01:03:10,250

that works and I've won that way you see

1585

01:03:15,700 --> 01:03:12,200

if I invite if I if I knock them out i

1586

01:03:18,220 --> 01:03:15,710

won the argument well there it was

1587

01:03:20,290 --> 01:03:18,230

another skeptics in the pub as we said

1588

01:03:22,030 --> 01:03:20,300

at the coronation hotel upstairs at the

1589

01:03:24,520 --> 01:03:22,040

mezz bar and the next one is going to be

1590

01:03:26,140 --> 01:03:24,530

on Thursday the fourth of July come

1591

01:03:27,550 --> 01:03:26,150

along and we'll see you then and by the

1592

01:03:31,030 --> 01:03:27,560

way if you want to know what we got up

1593

01:03:32,650 --> 01:03:31,040

to at tam 2012 the very last of the

1594

01:03:35,080 --> 01:03:32,660

interviews that I did there for that and

1595

01:03:38,860 --> 01:03:35,090

now on my own podcast go to Maynard

1596

01:03:42,820 --> 01:03:38,870

Maynard com au and on the front page

1597

01:03:44,350 --> 01:03:42,830

you'll see the music of jam 2012 part 2

1598

01:03:46,030 --> 01:03:44,360

there's some wild tunes in there there's

1599

01:03:48,670 --> 01:03:46,040

a little bit of mr. Richard Saunders a

1600

01:03:50,560 --> 01:03:48,680

few surprises in there and lindley the

1601

01:03:52,690 --> 01:03:50,570

postie requesting some devo it's all

1602

01:03:54,250 --> 01:03:52,700

there my not calm that I you I'm going

1603

01:03:56,910 --> 01:03:54,260

to go downstairs now and see if I can

1604

01:04:00,580 --> 01:03:56,920

just mingle with the conspiracy theory

1605

01:04:25,790 --> 01:04:00,590

you know Oswald was set up Oswald was a

1606

01:04:31,710 --> 01:04:28,410

thank you for listening to the skeptic

1607

01:04:34,410 --> 01:04:31,720

zone and I hope I certainly hope I get

1608

01:04:37,770 --> 01:04:34,420

to meet you at the amazing meeting in

1609

01:04:40,050 --> 01:04:37,780

Las Vegas free Pegasus folding lessons

1610

01:04:42,780 --> 01:04:40,060

what more could you ask for well quite

1611

01:04:44,730 --> 01:04:42,790

frankly a lot I guess I'm also happy to

1612

01:04:46,680 --> 01:04:44,740

say that our good friend Joanne Bellamy

1613

01:04:48,450 --> 01:04:46,690

will be hit the amazing meeting and

1614

01:04:50,430 --> 01:04:48,460

posting Lindley from Melbourne and

1615

01:04:52,170 --> 01:04:50,440

demanded valve from Canberra and lots of

1616

01:04:55,770 --> 01:04:52,180

other Australians will be at the amazing

1617

01:05:00,300 --> 01:04:55,780

meeting with no doubt lots of Minty's

1618

01:05:01,710 --> 01:05:00,310

and tim tams and must excite a must

1619

01:05:04,440 --> 01:05:01,720

stick before and you come to the amazing

1620

01:05:08,070 --> 01:05:04,450

meeting see if you can find me say

1621

01:05:11,250 --> 01:05:08,080

Richard I want my mustika and we'll take

1622

01:05:12,810 --> 01:05:11,260

it from there hmm Australians will know

1623

01:05:15,090 --> 01:05:12,820

what I mean thank you to all those

1624

01:05:17,070 --> 01:05:15,100

people who contribute only a dollar a

1625

01:05:19,080 --> 01:05:17,080

week some very generous people

1626

01:05:23,130 --> 01:05:19,090

contribute a bit more but a dollar a

1627

01:05:25,500 --> 01:05:23,140

week helps a lot ah by visiting WWE pegs

1628

01:05:28,200 --> 01:05:25,510

on TV and you can chip in to the

1629

01:05:30,750 --> 01:05:28,210

skeptics earn it helps us keep the show

1630

01:05:34,440 --> 01:05:30,760

going and thank you to all those people

1631

01:05:35,820 --> 01:05:34,450

who visit w WC optics com today you to

1632

01:05:38,400 --> 01:05:35,830

find out more about the Australian

1633

01:05:42,990 --> 01:05:38,410

skeptics and subscribe online to our

1634

01:05:46,020 --> 01:05:43,000

wonderful magazine the skeptic is a an

1635

01:05:48,780 --> 01:05:46,030

imaginative name for you but for this

1636

01:05:54,720 --> 01:05:48,790

week this is Richard Saunders signing

1637

01:05:57,060 --> 01:05:54,730

off from Sydney Australia you've been

1638

01:06:01,980 --> 01:05:57,070

listening to the skeptic zone

1639

01:06:05,010 --> 01:06:01,990

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