

1
00:00:00,000 --> 00:00:11,160
this is james randi and you're listening

2
00:00:01,949 --> 00:00:14,039
to the skeptic zone welcome to the

3
00:00:11,160 --> 00:00:30,059
skeptic zone the podcast from Australia

4
00:00:14,039 --> 00:00:33,269
for science and reason hello and welcome

5
00:00:30,059 --> 00:00:36,869
to the skeptic zone episode number 229

6
00:00:33,270 --> 00:00:38,219
for the ninth of March 2013 Richard

7
00:00:36,869 --> 00:00:41,429
Saunders here with you from the

8
00:00:38,219 --> 00:00:45,390
beautiful the gorgeous countryside at

9
00:00:41,429 --> 00:00:47,609
MIT emitter victoria australia it's just

10
00:00:45,390 --> 00:00:50,670
after dawn the birds are singing there's

11
00:00:47,609 --> 00:00:53,100
a babbling brook right down in front of

12
00:00:50,670 --> 00:00:55,710
me I'm at the house of lorries and Eden

13
00:00:53,100 --> 00:00:58,620
Smith now are the local skeptics here

14
00:00:55,710 --> 00:01:01,020
some of the local skeptics yes the birds

15
00:00:58,619 --> 00:01:06,090
are singing it's really a magical place

16
00:01:01,020 --> 00:01:07,579
I wish you were all here on this week's

17
00:01:06,090 --> 00:01:10,740
show we're going to kick off with a

18
00:01:07,579 --> 00:01:12,599
Maynard's spooky action what an

19
00:01:10,739 --> 00:01:14,459
interesting Maynard spooky action we

20
00:01:12,599 --> 00:01:16,769
have for you this week Maynard is going

21
00:01:14,459 --> 00:01:21,118
to be speaking with Simon through from

22
00:01:16,769 --> 00:01:23,670
the pirate party Australia is your

23
00:01:21,118 --> 00:01:26,909
online freedom at risk what is the law

24
00:01:23,670 --> 00:01:30,118
in regards to your online activities and

25
00:01:26,909 --> 00:01:31,618
can the government snoop on you that's

26
00:01:30,118 --> 00:01:34,438
coming up at the top of the show with

27
00:01:31,618 --> 00:01:37,618
Maynard's spooky action and the pirate

28
00:01:34,438 --> 00:01:39,328
party australia following that it's

29

00:01:37,618 --> 00:01:41,219
another installment of the week in

30
00:01:39,328 --> 00:01:43,879
science without a dear friend dr. Paul

31
00:01:41,219 --> 00:01:51,299
Willis from the Royal Institution in

32
00:01:43,879 --> 00:01:53,849
Adelaide that's w WR I you soo ba you

33
00:01:51,299 --> 00:01:57,509
and what a fine institution that is a

34
00:01:53,849 --> 00:01:59,938
wrap up of the week in science and then

35
00:01:57,509 --> 00:02:02,579
we have dr. Reggie reports well sort of

36
00:01:59,938 --> 00:02:04,199
a doctor rachy reports dr. Reggie along

37
00:02:02,578 --> 00:02:06,989
with our very own Peter Budaj from

38
00:02:04,200 --> 00:02:10,050
Australian skeptics and Julie Leask with

39
00:02:06,989 --> 00:02:13,539
Kate Tracy and Hannah Bell Nick were all

40
00:02:10,050 --> 00:02:17,260
interviewed on radio 2's

41
00:02:13,539 --> 00:02:20,798
I about anti-vaccination and vaccination

42
00:02:17,259 --> 00:02:23,408
issues yes radio to a CR where this

43
00:02:20,799 --> 00:02:27,310

report was first heard and we thank

44

00:02:23,408 --> 00:02:29,560
radio to ser very much but kindly

45

00:02:27,310 --> 00:02:32,680
allowing the skeptic zone to use this

46

00:02:29,560 --> 00:02:34,890
story and following that it's off to

47

00:02:32,680 --> 00:02:37,840
skeptics in the pub in Sydney where I

48

00:02:34,889 --> 00:02:39,039
play the part of Maynard that's usually

49

00:02:37,840 --> 00:02:41,139
may not running around with these

50

00:02:39,039 --> 00:02:42,669
microphone at skeptics in the pub may

51

00:02:41,139 --> 00:02:45,250
not couldn't make it this week so I took

52

00:02:42,669 --> 00:02:48,309
over may not duties and I asked some

53

00:02:45,250 --> 00:02:49,568
questions which you might ponder while

54

00:02:48,310 --> 00:02:51,188
you're listening to the skeptic zone

55

00:02:49,568 --> 00:02:53,530
until we get to that segment the

56

00:02:51,188 --> 00:02:56,500
questions I asked which are sort of

57

00:02:53,530 --> 00:02:59,650
related one do you think that human

58
00:02:56,500 --> 00:03:01,269
society as a whole will ever turn to

59
00:02:59,650 --> 00:03:04,930
science and reason and away from

60
00:03:01,269 --> 00:03:07,560
superstition belief and two if that does

61
00:03:04,930 --> 00:03:10,150
happen how long do you think it'll take

62
00:03:07,560 --> 00:03:13,419
will it be a week will it be two weeks

63
00:03:10,150 --> 00:03:17,769
will it be 10 years 20 years a century

64
00:03:13,419 --> 00:03:21,459
two centuries or so on ponder those

65
00:03:17,769 --> 00:03:25,569
questions and to wrap up the show oh man

66
00:03:21,459 --> 00:03:28,840
oh boy jealous or what may nod has a

67
00:03:25,568 --> 00:03:32,918
story about the electric conversion or

68
00:03:28,840 --> 00:03:36,400
the conversion to electric power of a

69
00:03:32,919 --> 00:03:39,909
DeLorean a real DeLorean and Maynard

70
00:03:36,400 --> 00:03:41,799
gets to have a ride in it Wow and I was

71
00:03:39,908 --> 00:03:44,560
putting this story together when may not

72
00:03:41,799 --> 00:03:47,829
sent it to me i was just so jealous join

73
00:03:44,560 --> 00:03:50,829
my dad for a ride in an electric

74
00:03:47,829 --> 00:03:55,479
DeLorean what has that got to do with

75
00:03:50,829 --> 00:03:58,389
skepticism i hear you cry well not so

76
00:03:55,479 --> 00:04:00,340
much but it's a DeLorean that's just so

77
00:03:58,389 --> 00:04:03,849
beautiful here birds are singing all the

78
00:04:00,340 --> 00:04:07,049
sun's now coming through the trees yes I

79
00:04:03,848 --> 00:04:07,048
think the birds can see it too

80
00:04:08,340 --> 00:04:13,750
what a magical place now the for the

81
00:04:11,770 --> 00:04:16,300
folks in Sydney Australian skeptics are

82
00:04:13,750 --> 00:04:20,019
having a dinner meeting on the sixth of

83
00:04:16,300 --> 00:04:23,199
April with dr. Brook Magnon T forensic

84
00:04:20,019 --> 00:04:25,389
pathologist genetic epidemiologist and

85
00:04:23,199 --> 00:04:29,889
author of the secret diary of a call

86

00:04:25,389 --> 00:04:31,870
girl talks on sex myths and why we

87
00:04:29,889 --> 00:04:34,479
believe them now that's going to be the

88
00:04:31,870 --> 00:04:37,899
ride Eastwood's leaf club west ryde

89
00:04:34,480 --> 00:04:39,759
seven o'clock on the sixth of april and

90
00:04:37,899 --> 00:04:41,289
you can book your tickets you don't have

91
00:04:39,759 --> 00:04:44,310
to be a subscriber to the skeptic

92
00:04:41,290 --> 00:04:47,260
magazine anybody can come along go to ww

93
00:04:44,310 --> 00:04:49,000
skeptics com au and I'm just being

94
00:04:47,259 --> 00:04:54,550
joined by a little dog at my feet hunt

95
00:04:49,000 --> 00:04:56,439
oh yes hello you sit sit there you sit

96
00:04:54,550 --> 00:04:57,850
there and listen to me another dog

97
00:04:56,439 --> 00:05:02,949
what's going on headed arrow good

98
00:04:57,850 --> 00:05:06,129
morning yes sit sit good dog it's all

99
00:05:02,949 --> 00:05:08,939
happening here folks right yes sir Thank

100
00:05:06,129 --> 00:05:11,680

You dogs the six of april seven o'clock

101

00:05:08,939 --> 00:05:14,170

skeptics com delay you for more details

102

00:05:11,680 --> 00:05:15,550

and to get your tickets is that the

103

00:05:14,170 --> 00:05:19,270

breakfast bill I just heard in the

104

00:05:15,550 --> 00:05:21,060

background it could well be well I

105

00:05:19,269 --> 00:05:23,560

better run to have my breakfast more

106

00:05:21,060 --> 00:05:25,629

information from me coming up during the

107

00:05:23,560 --> 00:05:27,069

show about the wonderful film festival

108

00:05:25,629 --> 00:05:30,009

i'm going to be speaking out in the

109

00:05:27,069 --> 00:05:33,370

czech republic but i think these dogs

110

00:05:30,009 --> 00:05:34,779

are telling me it's time to go and go up

111

00:05:33,370 --> 00:05:36,399

i'm not going to run downstairs because

112

00:05:34,779 --> 00:05:38,589

i'm not near stairs i'm going to run up

113

00:05:36,399 --> 00:05:40,870

this short hill here run to the

114

00:05:38,589 --> 00:05:45,009

breakfast table and while I'm doing that

115
00:05:40,870 --> 00:05:47,970
I hope you enjoy the skeptic zone come

116
00:05:45,009 --> 00:05:47,969
on dogs let's go

117
00:06:03,029 --> 00:06:10,739
here's my not spooky action at the

118
00:06:08,230 --> 00:06:10,740
distance

119
00:06:10,899 --> 00:06:14,779
well I don't often speak to politicians

120
00:06:13,310 --> 00:06:17,449
but I may well be speaking to a

121
00:06:14,779 --> 00:06:19,519
politician now from a party that doesn't

122
00:06:17,449 --> 00:06:21,408
have a lot of history but it does have a

123
00:06:19,519 --> 00:06:24,589
history internationally please welcome

124
00:06:21,408 --> 00:06:26,389
Simon through deputy of the Australian

125
00:06:24,589 --> 00:06:28,369
pirate party is that the correct name of

126
00:06:26,389 --> 00:06:29,930
the party Simon technically part party

127
00:06:28,370 --> 00:06:32,569
Australia yeah are you in any way

128
00:06:29,930 --> 00:06:34,490
affiliated or inspired by the people

129
00:06:32,569 --> 00:06:36,979
that I first heard this name from the

130
00:06:34,490 --> 00:06:38,750
guys from piratebay that got the Swedish

131
00:06:36,978 --> 00:06:41,240
Pirate Party going a few years back

132
00:06:38,750 --> 00:06:43,218
originally came from the same movement

133
00:06:41,240 --> 00:06:45,949
they originally set up to defend the

134
00:06:43,218 --> 00:06:48,319
Pirate Bay the downloading site to fight

135
00:06:45,949 --> 00:06:50,330
against attacks from the legal system in

136
00:06:48,319 --> 00:06:51,860
Sweden they form the political party

137
00:06:50,329 --> 00:06:53,778
that fight back and since then they got

138
00:06:51,860 --> 00:06:56,330
a few people elected to the European

139
00:06:53,778 --> 00:06:58,668
Parliament and it's better on the world

140
00:06:56,329 --> 00:07:00,829
and we've formed a local branch back

141
00:06:58,668 --> 00:07:02,418
around 2009 I think you can be fairly

142
00:07:00,829 --> 00:07:06,378
zigs inked and saying what is the pirate

143

00:07:02,418 --> 00:07:09,528
party's platform basically we came about

144
00:07:06,379 --> 00:07:12,408
due to the tax on civil liberties online

145
00:07:09,528 --> 00:07:15,500
so our main interest is trying to fight

146
00:07:12,408 --> 00:07:19,430
back against surveillance and bans on

147
00:07:15,500 --> 00:07:22,310
file sharing and governments generally

148
00:07:19,430 --> 00:07:24,740
using the changing technology to online

149
00:07:22,310 --> 00:07:27,439
as a way to strip back civil liberties a

150
00:07:24,740 --> 00:07:29,750
lot of people would think that their

151
00:07:27,439 --> 00:07:32,389
activities online are completely

152
00:07:29,750 --> 00:07:35,028
anonymous even now and I imagine almost

153
00:07:32,389 --> 00:07:36,740
every single thing you do online is

154
00:07:35,028 --> 00:07:38,689
recorded somewhere and can be found out

155
00:07:36,740 --> 00:07:40,460
by someone at any time unless you take

156
00:07:38,689 --> 00:07:43,370
extreme lengths so that's correct isn't

157
00:07:40,459 --> 00:07:45,649

it basically sites like Facebook Google

158

00:07:43,370 --> 00:07:47,930

to a lesser extent Twitter they over

159

00:07:45,649 --> 00:07:50,929

hand over information to government kind

160

00:07:47,930 --> 00:07:53,389

of relatively regular basis Facebook and

161

00:07:50,930 --> 00:07:55,218

Google both do it without usually

162

00:07:53,389 --> 00:07:56,900

putting up a fight Twitter's a bit more

163

00:07:55,218 --> 00:07:59,569

different with I'll actually try to

164

00:07:56,899 --> 00:08:01,728

defend the right to privacy in court I'd

165

00:07:59,569 --> 00:08:03,560

say actually we have the we have a

166

00:08:01,728 --> 00:08:05,149

petition going into the Australian

167

00:08:03,560 --> 00:08:07,129

Senate with our green Senator Scott

168

00:08:05,149 --> 00:08:09,829

Ludlam is presenting it's about the

169

00:08:07,129 --> 00:08:11,960

national security I inquiry that was

170

00:08:09,829 --> 00:08:15,519

held late last year where they want to

171

00:08:11,959 --> 00:08:18,288

collect all sort of phone carrier data

172
00:08:15,519 --> 00:08:20,508
mailing things like that without warrant

173
00:08:18,288 --> 00:08:22,098
use it as a way to track everyone they

174
00:08:20,509 --> 00:08:24,408
sort of claim that they're losing these

175
00:08:22,098 --> 00:08:26,688
abilities with people moving from

176
00:08:24,408 --> 00:08:29,868
on normal traditional land lines to

177
00:08:26,689 --> 00:08:32,089
evolve devices and internet I would

178
00:08:29,869 --> 00:08:33,949
think this makes it incredibly easier

179
00:08:32,089 --> 00:08:35,300
for them to find out things about people

180
00:08:33,948 --> 00:08:36,559
because if you want to track someone and

181
00:08:35,299 --> 00:08:38,299
they got a firm with them you got them

182
00:08:36,559 --> 00:08:41,179
exactly yeah and all you all you've got

183
00:08:38,299 --> 00:08:43,549
to do is present reasonable reason why

184
00:08:41,179 --> 00:08:46,370
you would like to do that and if you are

185
00:08:43,549 --> 00:08:48,500
a law enforcer you should have

186
00:08:46,370 --> 00:08:49,789
reasonable reason to find out where

187
00:08:48,500 --> 00:08:52,188
someone is you shouldn't just do it

188
00:08:49,789 --> 00:08:54,259
because it's a thursday there's limits

189
00:08:52,188 --> 00:08:56,360
to what they're actually can can't do

190
00:08:54,259 --> 00:08:58,068
but a lot of that stuff is actually they

191
00:08:56,360 --> 00:09:00,470
can do without a warrant even now

192
00:08:58,068 --> 00:09:03,860
there's they've got a lot of ability to

193
00:09:00,470 --> 00:09:06,350
see where phone towers in year and give

194
00:09:03,860 --> 00:09:07,759
up you're up against quite a task with

195
00:09:06,350 --> 00:09:09,920
the pirate party because as well as a

196
00:09:07,759 --> 00:09:11,240
warning about civil liberties you you

197
00:09:09,919 --> 00:09:13,128
have to try and let people know what

198
00:09:11,240 --> 00:09:14,509
civil liberties they've lost as well and

199
00:09:13,129 --> 00:09:17,659
a lot of people aren't aware of that

200

00:09:14,509 --> 00:09:19,759
they basically claiming access to rights

201
00:09:17,659 --> 00:09:21,769
I never actually had people would find

202
00:09:19,759 --> 00:09:23,629
like me how to access the emails and

203
00:09:21,769 --> 00:09:25,879
stuff like that they just have never

204
00:09:23,629 --> 00:09:27,620
really been able to do that actual

205
00:09:25,879 --> 00:09:30,379
biggest problems when the cows get

206
00:09:27,620 --> 00:09:32,568
abused countless records of place you

207
00:09:30,379 --> 00:09:35,809
know you looking up ex-lovers and stuff

208
00:09:32,568 --> 00:09:37,669
I'm criminal databases yes so does it

209
00:09:35,809 --> 00:09:39,888
tend to be law enforcement people

210
00:09:37,669 --> 00:09:41,568
overstepping their line or is it tend to

211
00:09:39,889 --> 00:09:43,579
be someone at the tax office looking up

212
00:09:41,568 --> 00:09:45,708
a celebrity what sort of cases have come

213
00:09:43,578 --> 00:09:47,629
to mind that you can think of cases of

214
00:09:45,708 --> 00:09:50,799

things like that going on quite a bit in

215

00:09:47,629 --> 00:09:53,360

the UK where they have a data retention

216

00:09:50,799 --> 00:09:56,838

regime already set up they've had

217

00:09:53,360 --> 00:09:58,519

tokamak employees selling data to data

218

00:09:56,839 --> 00:10:00,620

mining companies so selling all the

219

00:09:58,519 --> 00:10:04,990

private information of customers that

220

00:10:00,620 --> 00:10:07,578

which has been kept so say someone at a

221

00:10:04,990 --> 00:10:09,709

telecommunications company was offered

222

00:10:07,578 --> 00:10:11,419

money from a large newspaper

223

00:10:09,708 --> 00:10:13,969

conglomerate that would like to know

224

00:10:11,419 --> 00:10:16,610

phone numbers or a list of phone data

225

00:10:13,970 --> 00:10:18,769

they would offer a person quiet on the

226

00:10:16,610 --> 00:10:21,019

counter in front of Friday not the pub a

227

00:10:18,769 --> 00:10:22,490

bit of money and a USB stick might

228

00:10:21,019 --> 00:10:24,799

exchange hands that could be a

229
00:10:22,490 --> 00:10:27,049
theoretical situation yeah that's

230
00:10:24,799 --> 00:10:29,269
definitely not entirely sure what sort

231
00:10:27,049 --> 00:10:31,370
of system they're going to propose with

232
00:10:29,269 --> 00:10:34,399
the law because that this help inquiry

233
00:10:31,370 --> 00:10:35,539
into all the issues around it there's

234
00:10:34,399 --> 00:10:37,129
been a bit quiet about what they

235
00:10:35,539 --> 00:10:38,299
actually want to do I think also being

236
00:10:37,129 --> 00:10:39,710
election year they might

237
00:10:38,299 --> 00:10:41,750
like leave it on the back burner until

238
00:10:39,710 --> 00:10:43,940
after the election your party actually

239
00:10:41,750 --> 00:10:46,039
has quite a wide platform beyond just

240
00:10:43,940 --> 00:10:48,170
wanting to download music there's civil

241
00:10:46,039 --> 00:10:50,539
liberties of course there it goes into

242
00:10:48,169 --> 00:10:53,149
patent legislations and laws that apply

243
00:10:50,539 --> 00:10:54,379
internationally free trade agreements

244
00:10:53,149 --> 00:10:56,840
that Australia's signs you've actually

245
00:10:54,379 --> 00:10:59,049
got a party that covers a very wide area

246
00:10:56,840 --> 00:11:01,280
we've also in the process of trying to

247
00:10:59,049 --> 00:11:03,289
expand our platform in the lead-up to

248
00:11:01,279 --> 00:11:05,720
the election we have a conference in

249
00:11:03,289 --> 00:11:07,549
April introduce new ideas and see what

250
00:11:05,720 --> 00:11:09,860
members say if people want to find out

251
00:11:07,549 --> 00:11:12,199
more about the pirate party Australia is

252
00:11:09,860 --> 00:11:14,120
at the official name party Australia yep

253
00:11:12,200 --> 00:11:16,100
you've got a regular podcast you can

254
00:11:14,120 --> 00:11:17,539
have a listen to about weekly updates of

255
00:11:16,100 --> 00:11:19,190
what you get up to but what's the

256
00:11:17,539 --> 00:11:21,139
website where people can either get on

257

00:11:19,190 --> 00:11:24,080
there and agree or disagree with you

258
00:11:21,139 --> 00:11:25,789
alright party Gorga you Simon through

259
00:11:24,080 --> 00:11:29,710
deputy president of the pirate party

260
00:11:25,789 --> 00:11:29,709
Australia thanks for your time thank you

261
00:11:43,448 --> 00:11:50,118
hi this is brian dunning from the

262
00:11:46,009 --> 00:11:53,149
sceptile podcast ATS kept I calm for 15

263
00:11:50,119 --> 00:11:55,939
years now dr. Bob's trivia quiz has been

264
00:11:53,149 --> 00:11:58,399
a part of Australian skeptics each month

265
00:11:55,938 --> 00:12:01,278
the mysterious dr. Bob comes up with

266
00:11:58,399 --> 00:12:04,428
questions that defy all logic and reason

267
00:12:01,278 --> 00:12:06,678
only the best of the best dare attempt

268
00:12:04,428 --> 00:12:09,889
to answer these brain twisters and no

269
00:12:06,678 --> 00:12:15,458
google won't help you visit dr. Bob's

270
00:12:09,889 --> 00:12:18,860
quiz wordpress.com that's dr be OBS quiz

271
00:12:15,458 --> 00:12:21,798

wordpress.com to take part and to see

272

00:12:18,860 --> 00:12:27,459

the complete archive of dr. bob's trivia

273

00:12:21,798 --> 00:12:27,458

quiz I'm Brian Dunning from sceptile com

274

00:12:29,048 --> 00:12:35,058

welcome to a week in science this week

275

00:12:32,119 --> 00:12:43,850

fluoride in water paleoclimate shocks

276

00:12:35,058 --> 00:12:45,379

and how to build a planet fluoridation

277

00:12:43,850 --> 00:12:48,379

of water has been in the news recently

278

00:12:45,379 --> 00:12:50,899

as some towns have ended this effective

279

00:12:48,379 --> 00:12:52,999

public health practice but a long-term

280

00:12:50,899 --> 00:12:55,308

study of Australian teeth released this

281

00:12:52,999 --> 00:12:57,619

week reveals a significant reduction in

282

00:12:55,308 --> 00:12:59,719

dental problems in people with a longer

283

00:12:57,619 --> 00:13:02,660

history of drinking fluoridated water

284

00:12:59,720 --> 00:13:04,939

the study found around ten percent less

285

00:13:02,659 --> 00:13:07,338

decayed missing and filled teeth in

286
00:13:04,938 --> 00:13:09,918
people with a high lifetime fluoride

287
00:13:07,339 --> 00:13:12,319
exposure compared to those with a low

288
00:13:09,918 --> 00:13:13,970
exposure the study concluded that there

289
00:13:12,318 --> 00:13:16,878
was a dose-related effect of

290
00:13:13,970 --> 00:13:21,528
fluoridation the longer the exposure the

291
00:13:16,879 --> 00:13:23,058
less dental care problems occur a study

292
00:13:21,528 --> 00:13:25,399
released this week looked at the

293
00:13:23,058 --> 00:13:27,618
relationship between carbon dioxide and

294
00:13:25,399 --> 00:13:30,649
global warming at the end of the last

295
00:13:27,619 --> 00:13:33,259
ice age previous studies of gas trapped

296
00:13:30,649 --> 00:13:35,089
in antarctic ice showed that the climate

297
00:13:33,259 --> 00:13:38,600
was warmer during periods of high

298
00:13:35,089 --> 00:13:41,480
atmospheric co2 and colder when co2 was

299
00:13:38,600 --> 00:13:43,600
lower this study showed that these

300
00:13:41,480 --> 00:13:45,769
changes occurred simultaneously

301
00:13:43,600 --> 00:13:48,259
suggesting that they are related

302
00:13:45,769 --> 00:13:50,778
meanwhile a second study released this

303
00:13:48,259 --> 00:13:51,389
week reports that today's global climate

304
00:13:50,778 --> 00:13:53,100
is

305
00:13:51,389 --> 00:13:55,379
more than it has been for most of the

306
00:13:53,100 --> 00:13:57,659
last eleven thousand three hundred years

307
00:13:55,379 --> 00:14:00,590
a patent emerged with a rise in

308
00:13:57,659 --> 00:14:03,149
temperature as the last ice age ended

309
00:14:00,590 --> 00:14:05,310
warming conditions continued until a

310
00:14:03,149 --> 00:14:08,069
cooling trend over the five thousand

311
00:14:05,309 --> 00:14:10,619
years that ended around 200 years ago

312
00:14:08,070 --> 00:14:13,440
since then temperatures have risen

313
00:14:10,620 --> 00:14:17,129
steadily for science headlines in 30

314

00:14:13,440 --> 00:14:18,810
seconds BPA from plastic food containers

315
00:14:17,129 --> 00:14:22,439
may increase the risk of childhood

316
00:14:18,809 --> 00:14:24,629
asthma phantom pain the pain experienced

317
00:14:22,440 --> 00:14:26,520
from a missing limb is caused by

318
00:14:24,629 --> 00:14:29,460
disruptions to the sensorimotor cortex

319
00:14:26,519 --> 00:14:31,740
of the brain brain waves are shaped to

320
00:14:29,460 --> 00:14:33,509
allow people to focus on the sound of a

321
00:14:31,740 --> 00:14:36,570
speaker competing against background

322
00:14:33,509 --> 00:14:38,220
noise and the protein which allows the

323
00:14:36,570 --> 00:14:42,860
taste buds to tell the brain about

324
00:14:38,220 --> 00:14:45,300
different tastes has been identified and

325
00:14:42,860 --> 00:14:47,820
finally this week astronomers have

326
00:14:45,299 --> 00:14:50,729
observed a previously unseen phenomena

327
00:14:47,820 --> 00:14:53,640
the birth of a planet an international

328
00:14:50,730 --> 00:14:58,070

team studied a disk of gas and dust that

329

00:14:53,639 --> 00:15:01,679

surrounds the young star HD 100 546

330

00:14:58,070 --> 00:15:04,290

located in a burly 335 light-years from

331

00:15:01,679 --> 00:15:06,539

Earth the astronomers concluded that

332

00:15:04,289 --> 00:15:09,389

this celestial construction job could

333

00:15:06,539 --> 00:15:10,799

take tens of thousands of years allowing

334

00:15:09,389 --> 00:15:13,019

for changes to council planning

335

00:15:10,799 --> 00:15:17,549

regulations and overly incompetent

336

00:15:13,019 --> 00:15:19,470

architect and dodgy tradies it's the

337

00:15:17,549 --> 00:15:21,809

last week of Fringe so make sure to

338

00:15:19,470 --> 00:15:25,110

check out rock band ala jizzum this

339

00:15:21,809 --> 00:15:27,629

weekend and on march 16 we welcome back

340

00:15:25,110 --> 00:15:29,879

astronomer Fred Watson for a book club

341

00:15:27,629 --> 00:15:33,409

event featuring his new book stark

342

00:15:29,879 --> 00:15:36,480

raving mad information on our website

343
00:15:33,409 --> 00:15:38,789
that's been another big week in science

344
00:15:36,480 --> 00:15:41,190
you can watch this episode and other

345
00:15:38,789 --> 00:15:42,899
episodes of a week in science as well as

346
00:15:41,190 --> 00:15:46,650
a host of other great science videos

347
00:15:42,899 --> 00:15:48,720
through our website Arya's org dot a you

348
00:15:46,649 --> 00:15:51,809
where you can also sign up for

349
00:15:48,720 --> 00:15:53,580
notifications of future episodes you can

350
00:15:51,809 --> 00:15:57,059
follow a week in science on twitter

351
00:15:53,580 --> 00:15:59,040
using the hashtag weekend sigh i'm paul

352
00:15:57,059 --> 00:16:02,629
willis and on behalf of the our oils

353
00:15:59,039 --> 00:16:02,629
team i'll see you next week

354
00:16:04,700 --> 00:16:12,390
hey Kenny oh hi Tom I see this part yeah

355
00:16:08,909 --> 00:16:14,819
yes great weather oh look a unicorn

356
00:16:12,389 --> 00:16:18,000
unicorn there are no such things as

357
00:16:14,820 --> 00:16:20,160
unicorns silly yes there is no there

358
00:16:18,000 --> 00:16:22,429
isn't hey guys what are you arguing

359
00:16:20,159 --> 00:16:25,559
about tom thinks unicorns are real

360
00:16:22,429 --> 00:16:28,559
thanks so r let's look this up in the

361
00:16:25,559 --> 00:16:30,299
skeptics dictionary the what how can we

362
00:16:28,559 --> 00:16:32,009
do this in this park there is no

363
00:16:30,299 --> 00:16:33,719
computer here you guys probably don't

364
00:16:32,009 --> 00:16:36,778
know about the skeptics dictionary app

365
00:16:33,720 --> 00:16:40,710
available now for iPhone iPad and iPod

366
00:16:36,778 --> 00:16:42,269
touch in the app store Wow cool the app

367
00:16:40,710 --> 00:16:44,460
lets you access all of the great

368
00:16:42,269 --> 00:16:47,039
skeptics dictionary articles when you're

369
00:16:44,460 --> 00:16:49,769
on the go here let me look up unicorns

370
00:16:47,039 --> 00:16:52,319
not cool Kenny prepare to be proven

371

00:16:49,769 --> 00:16:56,460
wrong it says here the Unicorn is a

372
00:16:52,320 --> 00:16:57,720
creature from fables aha actually I see

373
00:16:56,460 --> 00:17:00,300
now that someone just dumped their ice

374
00:16:57,720 --> 00:17:09,750
cream cone on that horse's head thanks

375
00:17:00,299 --> 00:17:11,938
skeptics dictionary iphone app I'm still

376
00:17:09,750 --> 00:17:13,828
here this wonderful the countryside

377
00:17:11,939 --> 00:17:15,569
adhered millimeter having a chat too

378
00:17:13,828 --> 00:17:18,928
skeptical Steve Roberts steve roberts

379
00:17:15,568 --> 00:17:21,599
who drove Road a motorbike from London

380
00:17:18,929 --> 00:17:23,880
right across the maghuin dhonn in the in

381
00:17:21,599 --> 00:17:26,338
Russian Far East Russia yeah yeah we

382
00:17:23,880 --> 00:17:28,920
ride across Europe across Russia down to

383
00:17:26,338 --> 00:17:30,899
Kazakhstan and back out again and where

384
00:17:28,920 --> 00:17:32,580
Mongolia and then across the whole of

385
00:17:30,900 --> 00:17:35,040

Siberia and out the other side into them

386

00:17:32,579 --> 00:17:36,659

into the Russian Far East and we ended

387

00:17:35,039 --> 00:17:38,940

up in a town called Magadan which is

388

00:17:36,660 --> 00:17:42,420

where the road ends and it's so low near

389

00:17:38,940 --> 00:17:44,940

Vladivostok but some is down that in any

390

00:17:42,420 --> 00:17:47,039

way that's extraordinary and you wrote a

391

00:17:44,940 --> 00:17:49,679

blog about your adventures I did yeah if

392

00:17:47,039 --> 00:17:52,139

you google steve road of bones it'll

393

00:17:49,679 --> 00:17:53,340

come out number one probably i've seen

394

00:17:52,140 --> 00:17:54,840

some of the video and some of the

395

00:17:53,339 --> 00:17:57,689

pictures you took it looks like an

396

00:17:54,839 --> 00:17:59,369

extraordinary trip to take on the back

397

00:17:57,690 --> 00:18:01,920

of a motorbike all the fun of a lot of

398

00:17:59,369 --> 00:18:03,629

light better still yeah as a rather

399

00:18:01,920 --> 00:18:06,000

didn't think to do really I mean this is

400
00:18:03,630 --> 00:18:08,910
wet and cold unpleasant or is very high

401
00:18:06,000 --> 00:18:10,410
Oh Kazakhstan the Sun was plus 40

402
00:18:08,910 --> 00:18:13,259
degrees and he wearing black motorcycle

403
00:18:10,410 --> 00:18:15,080
clothing and then Siberia the Ottomans

404
00:18:13,259 --> 00:18:17,690
you know zero degrees and it

405
00:18:15,079 --> 00:18:20,480
and that was unpleasant now that we know

406
00:18:17,690 --> 00:18:22,130
why we did it because it was some people

407
00:18:20,480 --> 00:18:23,808
go to the beach and barley you know

408
00:18:22,130 --> 00:18:26,269
that's very nice but that's what I did

409
00:18:23,808 --> 00:18:28,158
but now in your great adventure did you

410
00:18:26,269 --> 00:18:30,620
go anywhere near the czech republic by

411
00:18:28,159 --> 00:18:32,659
any chance no i didn't sorry about that

412
00:18:30,619 --> 00:18:34,969
i know you he can be carved straight

413
00:18:32,659 --> 00:18:36,620
across to cut that one out now that's

414
00:18:34,970 --> 00:18:38,659
alright because i mentioned the czech

415
00:18:36,619 --> 00:18:40,788
republic because as I've been mentioning

416
00:18:38,659 --> 00:18:44,929
to my listeners i'm off there to a

417
00:18:40,788 --> 00:18:47,869
rather amazing looking convention

418
00:18:44,929 --> 00:18:48,740
conference academia film allah book and

419
00:18:47,869 --> 00:18:50,719
we've been wondering how to pronounce

420
00:18:48,740 --> 00:18:54,319
olomouc column which I can't help you

421
00:18:50,720 --> 00:18:56,929
that I don't speak Czech oh well olo mo

422
00:18:54,319 --> 00:18:59,990
you see ya is how it's spelt but that's

423
00:18:56,929 --> 00:19:01,850
in chick and i'm not i'm sure i'll be

424
00:18:59,990 --> 00:19:04,638
corrected by the good folks there i do i

425
00:19:01,849 --> 00:19:06,949
but it folks if you actually on here's

426
00:19:04,638 --> 00:19:11,209
something to do on YouTube have a search

427
00:19:06,950 --> 00:19:13,490
for this place Oh L om oh you see and

428

00:19:11,210 --> 00:19:15,610
what a wonderfully interesting town it

429
00:19:13,490 --> 00:19:17,960
is in the Czech Republic it looks like a

430
00:19:15,609 --> 00:19:20,750
university and lots of nightlife and

431
00:19:17,960 --> 00:19:22,880
culture and wonderful streets with

432
00:19:20,750 --> 00:19:27,109
modern trams I'm really looking forward

433
00:19:22,880 --> 00:19:31,000
to visiting it and those festival itself

434
00:19:27,109 --> 00:19:33,500
which is the 48th the 48th international

435
00:19:31,000 --> 00:19:36,740
event they have there look at what they

436
00:19:33,500 --> 00:19:39,919
have mathematics with Fermat's Last

437
00:19:36,740 --> 00:19:43,190
Theorem pseudoscience and academic film

438
00:19:39,919 --> 00:19:46,639
fest again teaching of science through

439
00:19:43,190 --> 00:19:48,080
film the UFOs will be discussed me I'll

440
00:19:46,638 --> 00:19:49,519
be there of course discussing water

441
00:19:48,079 --> 00:19:52,898
divining which is why we're in mid

442
00:19:49,519 --> 00:19:55,399

emitter this very weekend we've got

443

00:19:52,898 --> 00:19:59,689

vaccination issues coming up politics

444

00:19:55,398 --> 00:20:06,018

global warming games pc games folks have

445

00:19:59,690 --> 00:20:12,200

a look at the website it's wwa f0 c ZD

446

00:20:06,019 --> 00:20:14,298

or i could say c z CZ for Americans it

447

00:20:12,200 --> 00:20:16,038

looks like a fantastic trip more details

448

00:20:14,298 --> 00:20:17,509

coming up on the skeptic zone in the

449

00:20:16,038 --> 00:20:18,400

next couple of weeks and I'll try and

450

00:20:17,509 --> 00:20:36,039

convince

451

00:20:18,400 --> 00:20:40,950

to come anyway now it's time for dr.

452

00:20:36,039 --> 00:20:40,950

Rachel reports with dr. Rachel Dunlop

453

00:20:42,359 --> 00:20:47,859

the anti-vaccination movement is in the

454

00:20:45,160 --> 00:20:49,180

spotlight again last week the Australian

455

00:20:47,859 --> 00:20:51,459

Competition and Consumer Commission

456

00:20:49,180 --> 00:20:53,890

began civil proceedings against

457
00:20:51,460 --> 00:20:55,480
homeopathy plus a website that claimed

458
00:20:53,890 --> 00:20:58,030
that the whooping cough vaccine was

459
00:20:55,480 --> 00:21:00,069
ineffective and unreliable at the same

460
00:20:58,029 --> 00:21:01,750
time the Australian vaccination network

461
00:21:00,069 --> 00:21:03,849
is fighting an order from the New South

462
00:21:01,750 --> 00:21:05,670
Wales Department of Fair Trading to

463
00:21:03,849 --> 00:21:08,619
change its name or risk being shut down

464
00:21:05,670 --> 00:21:10,090
the department claims that since the avn

465
00:21:08,619 --> 00:21:12,369
is a lobby group with a solely

466
00:21:10,089 --> 00:21:14,889
anti-vaccination stance its name is

467
00:21:12,369 --> 00:21:17,199
misleading dr. rachel Dunlop is a

468
00:21:14,890 --> 00:21:19,000
postdoctoral research fellow at UTS in

469
00:21:17,200 --> 00:21:21,700
the school of medical and molecular

470
00:21:19,000 --> 00:21:23,289
Biosciences she says that the case

471
00:21:21,700 --> 00:21:25,569
involving the a triple c and the

472
00:21:23,289 --> 00:21:27,190
homeopathic website is unusual because

473
00:21:25,569 --> 00:21:29,679
it would normally be a matter for the

474
00:21:27,190 --> 00:21:31,660
Therapeutic Goods Administration but the

475
00:21:29,680 --> 00:21:34,210
TGA doesn't have a lot of power to shut

476
00:21:31,660 --> 00:21:36,100
misleading websites down in fact the

477
00:21:34,210 --> 00:21:38,410
website in question has been pursued by

478
00:21:36,099 --> 00:21:39,939
the TGA before I don't think that this

479
00:21:38,410 --> 00:21:41,860
is going to become a precedence where

480
00:21:39,940 --> 00:21:44,289
the h CC does this stuff on a regular

481
00:21:41,859 --> 00:21:46,659
basis because they don't have the

482
00:21:44,289 --> 00:21:48,129
resources and it's not really what

483
00:21:46,660 --> 00:21:49,900
they're supposed to do it's not really

484
00:21:48,130 --> 00:21:51,430
their role their role is not necessarily

485

00:21:49,900 --> 00:21:53,680
in health claims that really is the role

486
00:21:51,430 --> 00:21:56,980
of the TGA so it really highlights the

487
00:21:53,680 --> 00:21:58,990
fact that the TGA needs to be over hold

488
00:21:56,980 --> 00:22:00,730
and we need to get new legislation in so

489
00:21:58,990 --> 00:22:03,430
that they can prosecute things like this

490
00:22:00,730 --> 00:22:04,930
with respect to the avian being told to

491
00:22:03,430 --> 00:22:06,850
change their name by the Department of

492
00:22:04,930 --> 00:22:09,789
Fair Trading this is a serious matter

493
00:22:06,849 --> 00:22:11,559
this is not a trivial matter and also I

494
00:22:09,789 --> 00:22:13,869
think this is a thin and end of the

495
00:22:11,559 --> 00:22:15,759
wedge for the avian this is something

496
00:22:13,869 --> 00:22:17,259
that the Department of Fair Trading have

497
00:22:15,759 --> 00:22:19,779
gone in with but I think they have a lot

498
00:22:17,259 --> 00:22:21,009
more of their sleeves I think they're

499
00:22:19,779 --> 00:22:23,099

pretty determined to see this

500

00:22:21,009 --> 00:22:25,539

organization being pulled into line

501

00:22:23,099 --> 00:22:27,789

getting your children vaccinated is not

502

00:22:25,539 --> 00:22:30,639

compulsory in Australia and some parents

503

00:22:27,789 --> 00:22:32,200

still opt out associate professor Julie

504

00:22:30,640 --> 00:22:34,570

Liske at the School of Public

505

00:22:32,200 --> 00:22:36,429

at the University of Sydney says that

506

00:22:34,569 --> 00:22:38,019

the majority of Australian parents do

507

00:22:36,429 --> 00:22:39,970

get their children vaccinated and

508

00:22:38,019 --> 00:22:42,069

despite the number being low in some

509

00:22:39,970 --> 00:22:44,470

areas it has not decreased over the last

510

00:22:42,069 --> 00:22:47,319

10 years the key to keeping these

511

00:22:44,470 --> 00:22:51,880

numbers healthy is good communication we

512

00:22:47,319 --> 00:22:54,519

have to be very vigilant about trends in

513

00:22:51,880 --> 00:22:56,500

declining confidence in vaccines at the

514
00:22:54,519 --> 00:22:58,808
moment having about 2% of parents who

515
00:22:56,500 --> 00:23:01,480
actively refuse vaccinations we can't

516
00:22:58,808 --> 00:23:03,548
afford for that group to grow in that

517
00:23:01,480 --> 00:23:05,649
group growth we will lose her immunity

518
00:23:03,548 --> 00:23:09,629
and we will get more outbreaks and

519
00:23:05,648 --> 00:23:13,298
epidemics so it is very important that

520
00:23:09,630 --> 00:23:15,940
government prioritize good communication

521
00:23:13,298 --> 00:23:18,339
and that is not just about delivering

522
00:23:15,940 --> 00:23:21,370
information to people in that one-way

523
00:23:18,339 --> 00:23:23,319
process associate professor Liske says

524
00:23:21,369 --> 00:23:25,928
that the anti-vaccination movement is as

525
00:23:23,319 --> 00:23:28,750
old as vaccines themselves and it's not

526
00:23:25,929 --> 00:23:30,130
going away parents can get confused when

527
00:23:28,750 --> 00:23:33,929
they find too much conflicting

528
00:23:30,130 --> 00:23:37,570
information I think it's difficult when

529
00:23:33,929 --> 00:23:39,880
parents are looking for information and

530
00:23:37,569 --> 00:23:41,740
they feel like you're either getting a

531
00:23:39,880 --> 00:23:43,809
really anti-vaccine stuff or the really

532
00:23:41,740 --> 00:23:45,940
probe actually in sort of propaganda

533
00:23:43,808 --> 00:23:48,460
which wants to sweep the risks under the

534
00:23:45,940 --> 00:23:51,250
carpet the really good quality

535
00:23:48,460 --> 00:23:54,669
information will well own up to the fact

536
00:23:51,250 --> 00:23:56,769
that there are some risks there the

537
00:23:54,669 --> 00:24:00,610
serious side effects of vaccinations are

538
00:23:56,769 --> 00:24:03,759
quite rare and overalls of benefits of

539
00:24:00,609 --> 00:24:05,589
vaccinations far outweigh their risk but

540
00:24:03,759 --> 00:24:08,798
it's still important to acknowledge

541
00:24:05,589 --> 00:24:12,638
those risks to give people a sense of

542

00:24:08,798 --> 00:24:15,308
how big they are what they are so that

543
00:24:12,638 --> 00:24:17,619
people who are concerned can sort of get

544
00:24:15,308 --> 00:24:20,470
a sensitive we have a boundaries of

545
00:24:17,619 --> 00:24:22,569
those risks liar Peter Budaj is a member

546
00:24:20,470 --> 00:24:24,429
of the organization Australian skeptics

547
00:24:22,569 --> 00:24:25,869
and has his own website where he

548
00:24:24,429 --> 00:24:28,090
challenges misinformation and

549
00:24:25,869 --> 00:24:29,979
pseudoscience on the internet he is

550
00:24:28,089 --> 00:24:31,619
passionate about combating false claims

551
00:24:29,980 --> 00:24:35,528
made by the anti-vaccination movement

552
00:24:31,619 --> 00:24:38,319
that there is an enormous movement which

553
00:24:35,528 --> 00:24:40,990
opposes the idea the doctors are good

554
00:24:38,319 --> 00:24:42,450
people that is you know doctors are

555
00:24:40,990 --> 00:24:44,528
apparently only and if the money

556
00:24:42,450 --> 00:24:46,009

vaccines are only developed to make

557

00:24:44,528 --> 00:24:48,619
billions of dollars for pharmacy

558

00:24:46,009 --> 00:24:50,809
companies well I've always taken the

559

00:24:48,619 --> 00:24:52,729
view that I'm not trying never going to

560

00:24:50,809 --> 00:24:55,039
convince a true believer my job is to

561

00:24:52,730 --> 00:24:57,410
expose them to the fence-sitters so

562

00:24:55,039 --> 00:25:00,379
people can actually make a choice and

563

00:24:57,410 --> 00:25:01,550
either I get that part in the collection

564

00:25:00,380 --> 00:25:02,870
of hate mail I get from people telling

565

00:25:01,549 --> 00:25:06,379
me on the dreadful person and I should

566

00:25:02,869 --> 00:25:08,599
die I I get quite humid number of emails

567

00:25:06,380 --> 00:25:10,130
and people who say thank you because a

568

00:25:08,599 --> 00:25:12,349
lot of bullet aware or I'll get a little

569

00:25:10,130 --> 00:25:14,570
bit of information from somebody and go

570

00:25:12,349 --> 00:25:16,459
looking on the internet and what they

571
00:25:14,569 --> 00:25:18,319
found is someone actually pointing out

572
00:25:16,460 --> 00:25:19,789
the flaws the things that the

573
00:25:18,319 --> 00:25:22,819
anti-vaccination people say that aren't

574
00:25:19,789 --> 00:25:23,899
true and that points from back to

575
00:25:22,819 --> 00:25:26,809
website all that's going to look at the

576
00:25:23,900 --> 00:25:29,690
science can I can really can't believe

577
00:25:26,809 --> 00:25:31,429
my doctor but for parents the issue can

578
00:25:29,690 --> 00:25:33,460
be about a conflict between social

579
00:25:31,430 --> 00:25:36,650
responsibility and individual rights

580
00:25:33,460 --> 00:25:38,029
Kate Tracy has a 10 month old child and

581
00:25:36,650 --> 00:25:40,640
is a holistic practitioner in

582
00:25:38,029 --> 00:25:42,619
alternative medicine she says she is

583
00:25:40,640 --> 00:25:44,780
resistant to get her baby vaccinated but

584
00:25:42,619 --> 00:25:46,569
not one hundred percent against it it's

585
00:25:44,779 --> 00:25:49,970
a very complicated argument on that

586
00:25:46,569 --> 00:25:53,240
position because argument for

587
00:25:49,970 --> 00:25:56,500
vaccination is sure one in a hundred

588
00:25:53,240 --> 00:26:00,380
thousand people may have a negative

589
00:25:56,500 --> 00:26:02,990
response to vaccination you know which

590
00:26:00,380 --> 00:26:05,870
could could stab into them for the rest

591
00:26:02,990 --> 00:26:09,680
of their lives but for the good of

592
00:26:05,869 --> 00:26:12,019
society we get vaccinated so it is a

593
00:26:09,680 --> 00:26:14,720
it's a social thing it's not an

594
00:26:12,019 --> 00:26:16,700
individual thing but we live in a place

595
00:26:14,720 --> 00:26:19,400
where we have individual rights you know

596
00:26:16,700 --> 00:26:20,779
we have autonomy medical economy we

597
00:26:19,400 --> 00:26:24,980
don't have to do what the Western

598
00:26:20,779 --> 00:26:27,680
medical convention dictates yeah I just

599

00:26:24,980 --> 00:26:31,519
feel of what I've read that it's

600
00:26:27,680 --> 00:26:33,500
possibly and maybe an outdated mode of

601
00:26:31,519 --> 00:26:35,269
protecting the immune system like we

602
00:26:33,500 --> 00:26:37,849
have many other ways to strengthen the

603
00:26:35,269 --> 00:26:39,920
immune system and for children who grow

604
00:26:37,849 --> 00:26:42,469
up unvaccinated the responses from other

605
00:26:39,920 --> 00:26:44,120
people can strike a real nerve Hannah

606
00:26:42,470 --> 00:26:46,160
Bell Nick's mother decided not to

607
00:26:44,119 --> 00:26:48,589
vaccinate her or her sister as children

608
00:26:46,160 --> 00:26:51,140
she says that the negative comments from

609
00:26:48,589 --> 00:26:54,709
strangers can be surprising it isn't an

610
00:26:51,140 --> 00:26:57,670
issue in my life at all until it comes

611
00:26:54,710 --> 00:27:01,000
up saying conversation I mention it and

612
00:26:57,670 --> 00:27:03,279
people have very strong views about it

613
00:27:01,000 --> 00:27:10,000

and often they see me as some as somehow

614

00:27:03,279 --> 00:27:14,559

harmful to society and that I am making

615

00:27:10,000 --> 00:27:17,589

in some ways a in moral decision to be

616

00:27:14,559 --> 00:27:19,929

part of society and not be vaccinated

617

00:27:17,589 --> 00:27:21,730

the way everyone else is Hannah says

618

00:27:19,930 --> 00:27:23,680

she's choosing not to get vaccinations

619

00:27:21,730 --> 00:27:26,529

herself as an adult but will vaccinate

620

00:27:23,680 --> 00:27:29,500

her future children so no I wouldn't be

621

00:27:26,529 --> 00:27:31,899

continuing it on but I don't want to be

622

00:27:29,500 --> 00:27:34,509

vaccinated as an adult and and I feel

623

00:27:31,900 --> 00:27:35,950

like people should be allowed to choose

624

00:27:34,509 --> 00:27:38,109

whether to vaccinate their children or

625

00:27:35,950 --> 00:27:40,980

not when it is an informed decision and

626

00:27:38,109 --> 00:27:43,240

it's likely that if I were to get a

627

00:27:40,980 --> 00:27:45,279

disease that other people that said

628
00:27:43,240 --> 00:27:47,410
before I could I can treat that I can be

629
00:27:45,279 --> 00:27:49,660
treated so why is it that some people

630
00:27:47,410 --> 00:27:52,390
reject vaccines that were developed to

631
00:27:49,660 --> 00:27:54,580
save lives associate professor Liske

632
00:27:52,390 --> 00:27:56,500
says that there was a time when science

633
00:27:54,579 --> 00:27:58,899
and technology were imbued with a lot of

634
00:27:56,500 --> 00:28:01,480
hope and promise but not everybody is so

635
00:27:58,900 --> 00:28:03,730
trusting anymore so you know there are

636
00:28:01,480 --> 00:28:05,980
those occasional that spectacular

637
00:28:03,730 --> 00:28:08,769
failures of medicine like a Saliva might

638
00:28:05,980 --> 00:28:12,610
like x-raying the feet of all children

639
00:28:08,769 --> 00:28:14,740
to check their shoe sizes and and then

640
00:28:12,609 --> 00:28:16,869
really realizing that that those

641
00:28:14,740 --> 00:28:20,170
practice was we're actually dangerous

642
00:28:16,869 --> 00:28:23,639
and needed to be changed and I think the

643
00:28:20,170 --> 00:28:26,560
anti-vaccine messaging and certainly the

644
00:28:23,640 --> 00:28:30,520
people who feel mistrust in vaccines or

645
00:28:26,559 --> 00:28:34,899
other medical technologies locate their

646
00:28:30,519 --> 00:28:38,740
concerns within those wider problems

647
00:28:34,900 --> 00:28:41,759
that are genuine issues around the

648
00:28:38,740 --> 00:28:44,079
occasional failures of medicine and

649
00:28:41,759 --> 00:28:48,190
pharmaceuticals there's also this

650
00:28:44,079 --> 00:28:49,839
tendency to compute into consumerism in

651
00:28:48,190 --> 00:28:53,019
health care and we call it health is

652
00:28:49,839 --> 00:28:55,509
impaired people are very consciously

653
00:28:53,019 --> 00:28:57,519
thinking about their health care choices

654
00:28:55,509 --> 00:29:01,359
and being much more involved in them

655
00:28:57,519 --> 00:29:03,069
which is a good team and vaccination you

656

00:29:01,359 --> 00:29:06,159
know gets brought into that kind of

657
00:29:03,069 --> 00:29:08,409
discussion or discourse and so when you

658
00:29:06,160 --> 00:29:10,390
hear about people moms in particular

659
00:29:08,410 --> 00:29:11,470
saying look I want to know I want to

660
00:29:10,390 --> 00:29:14,080
look into this

661
00:29:11,470 --> 00:29:17,470
sure that I'm making the right decision

662
00:29:14,079 --> 00:29:20,798
for my child that's a mom who is wanting

663
00:29:17,470 --> 00:29:24,490
to do the best by her child and is also

664
00:29:20,798 --> 00:29:27,759
concerned to not just take what's what's

665
00:29:24,490 --> 00:29:30,519
an even and a sort of backlash against

666
00:29:27,759 --> 00:29:32,408
paternalistic medicine dr. Dunlop says

667
00:29:30,519 --> 00:29:34,839
that the reasons lie in the perceptions

668
00:29:32,409 --> 00:29:37,750
of risk and the emotions surrounding it

669
00:29:34,839 --> 00:29:40,720
people are unable to really rationalize

670
00:29:37,750 --> 00:29:42,940

risk anymore so I think with vaccination

671

00:29:40,720 --> 00:29:44,440

in particular because we don't see the

672

00:29:42,940 --> 00:29:45,880

disease's anymore because we're not

673

00:29:44,440 --> 00:29:49,000

going to school and we're seeing kids

674

00:29:45,880 --> 00:29:52,870

with polio in calipers or kids dropping

675

00:29:49,000 --> 00:29:54,548

dead from tuberculosis the risk of the

676

00:29:52,869 --> 00:29:56,949

side effects of vaccination is now

677

00:29:54,548 --> 00:29:59,710

elevated in people's minds because we

678

00:29:56,950 --> 00:30:02,558

don't have much of a concept of the risk

679

00:29:59,710 --> 00:30:05,740

of the disease anymore the other issue I

680

00:30:02,558 --> 00:30:08,048

think is that if your child is our in a

681

00:30:05,740 --> 00:30:11,409

playground or at primary school and they

682

00:30:08,048 --> 00:30:13,240

catch a bacteria like pertussis and they

683

00:30:11,409 --> 00:30:15,010

get sick that's a horrible thing to

684

00:30:13,240 --> 00:30:17,288

happen but that's nothing that you were

685
00:30:15,009 --> 00:30:19,298
involved in it wasn't your fault the

686
00:30:17,288 --> 00:30:21,669
bacteria came along you keep gothic

687
00:30:19,298 --> 00:30:23,710
that's fine if you take your child to a

688
00:30:21,669 --> 00:30:25,870
doctor and you agree to a medical

689
00:30:23,710 --> 00:30:28,150
procedure which is a vaccination and

690
00:30:25,869 --> 00:30:30,579
they are one in a million who gets a

691
00:30:28,150 --> 00:30:32,710
side effect and or bad adverse event

692
00:30:30,579 --> 00:30:34,658
then you're directly responsible for

693
00:30:32,710 --> 00:30:36,069
causing your child to be sick so all

694
00:30:34,659 --> 00:30:38,350
that stuff is going on in people's heads

695
00:30:36,069 --> 00:30:42,399
and we're influenced by that really

696
00:30:38,349 --> 00:30:45,158
easily and Sciences is cold and it's you

697
00:30:42,400 --> 00:30:48,100
know full of maths and graphs it's not

698
00:30:45,159 --> 00:30:50,650
an emotional response people are driven

699
00:30:48,099 --> 00:30:51,819
emotionally so when you see stories that

700
00:30:50,650 --> 00:30:53,950
are on the internet whether they're true

701
00:30:51,819 --> 00:30:56,109
or not that a child had a vaccination

702
00:30:53,950 --> 00:30:58,450
and had an adverse event and now has

703
00:30:56,109 --> 00:31:00,579
autism which is not actually a side

704
00:30:58,450 --> 00:31:02,710
effect of vaccinations but that stuff is

705
00:31:00,579 --> 00:31:05,529
out there that sticks in people's heads

706
00:31:02,710 --> 00:31:08,159
and it's like ringing a bell you can't

707
00:31:05,529 --> 00:31:08,158
unring a bell

708
00:31:16,400 --> 00:31:22,650
hi this is scary papi i am ross Fletcher

709
00:31:20,160 --> 00:31:26,100
okay Ross hey we're from a podcast

710
00:31:22,650 --> 00:31:27,840
called oh no Ross and Carrie we find out

711
00:31:26,099 --> 00:31:29,219
what happens when you show up and ask

712
00:31:27,839 --> 00:31:31,470
questions we've hung out with the

713

00:31:29,220 --> 00:31:34,049
Cabalists the Mormons we've gone and

714
00:31:31,470 --> 00:31:36,450
gotten ear candle gone to the Sikhs we

715
00:31:34,049 --> 00:31:38,099
show up so you don't have to so find out

716
00:31:36,450 --> 00:31:40,200
where we're going next we'll even have

717
00:31:38,099 --> 00:31:42,629
special episodes where we have famous

718
00:31:40,200 --> 00:31:44,610
guests like Brian Dalton from mr. deity

719
00:31:42,630 --> 00:31:46,590
you heard that awesome theme music he

720
00:31:44,609 --> 00:31:50,819
wrote that you should come visit us at

721
00:31:46,589 --> 00:31:53,609
Oh No podcast.com or facebook.com slash

722
00:31:50,819 --> 00:31:57,869
on rack what the hell's honor a cross Oh

723
00:31:53,609 --> 00:32:01,639
in RAC oh no Ross and Carrie that's our

724
00:31:57,869 --> 00:32:01,639
show that's a smart come join us

725
00:32:08,950 --> 00:32:13,220
well we're here at Sydney's skeptics in

726
00:32:11,480 --> 00:32:17,000
the pub and again it's been another full

727
00:32:13,220 --> 00:32:19,250

house Richard Saunders here being mean I

728

00:32:17,000 --> 00:32:21,049

im mean arts and ankles may not can't be

729

00:32:19,250 --> 00:32:23,839

with us may not normally the guy running

730

00:32:21,049 --> 00:32:25,430

around here skeptics in the pub asking

731

00:32:23,839 --> 00:32:28,069

the big questions I'm with Richard hello

732

00:32:25,430 --> 00:32:29,390

Richard could Oprah two got into it to

733

00:32:28,069 --> 00:32:32,329

see you here again on skeptics in the

734

00:32:29,390 --> 00:32:34,300

pub the big question this week is do you

735

00:32:32,329 --> 00:32:36,949

think that human society will eventually

736

00:32:34,299 --> 00:32:39,109

turn to the side of science and reason

737

00:32:36,950 --> 00:32:42,950

and it's so how long do you think that

738

00:32:39,109 --> 00:32:46,189

will take oh dear we've got different

739

00:32:42,950 --> 00:32:50,120

human populations of all via different

740

00:32:46,190 --> 00:32:53,509

rights and that I think probably sooner

741

00:32:50,119 --> 00:32:55,819

with the western side of things but with

742
00:32:53,509 --> 00:32:57,410
the developing world that there's still

743
00:32:55,819 --> 00:33:01,639
a little bit too much religious

744
00:32:57,410 --> 00:33:04,100
influence and I don't know I mean I

745
00:33:01,640 --> 00:33:07,940
don't know seems to be a pretty popular

746
00:33:04,099 --> 00:33:11,509
answer over here so yeah I'm and it it

747
00:33:07,940 --> 00:33:13,460
depends on here there we go that's a

748
00:33:11,509 --> 00:33:16,629
Buddhist answer is I think I'm gonna get

749
00:33:13,460 --> 00:33:19,640
ya it's a tricky question nigga Richard

750
00:33:16,630 --> 00:33:21,620
yes the mad with that with a very

751
00:33:19,640 --> 00:33:23,750
fluorescent orange microphone

752
00:33:21,619 --> 00:33:24,829
approaching rapidly become working fine

753
00:33:23,750 --> 00:33:26,660
is it though I didn't know there was a

754
00:33:24,829 --> 00:33:28,339
microphone I thought which it was just

755
00:33:26,660 --> 00:33:30,710
never won something out of Fraggles Rock

756
00:33:28,339 --> 00:33:33,019
actually it's the only microphone cover

757
00:33:30,710 --> 00:33:35,120
i had yes folks you know that voice so

758
00:33:33,019 --> 00:33:37,579
well it's Joanne better move from

759
00:33:35,119 --> 00:33:39,739
reality by tell a joke and Richard I

760
00:33:37,579 --> 00:33:42,439
really must do reality bites again it's

761
00:33:39,740 --> 00:33:43,940
been ages yes please do well I promise

762
00:33:42,440 --> 00:33:44,900
but if you know we're here it skeptics

763
00:33:43,940 --> 00:33:46,820
in the public course and the big

764
00:33:44,900 --> 00:33:48,920
question tonight the big question with

765
00:33:46,819 --> 00:33:51,259
two big questions is do you think that

766
00:33:48,920 --> 00:33:52,850
human society as a whole will eventually

767
00:33:51,259 --> 00:33:55,319
turn to the side of science and reason

768
00:33:52,849 --> 00:34:01,219
and if so alone

769
00:33:55,319 --> 00:34:05,309
that might take a short answer no i

770

00:34:01,220 --> 00:34:06,750
don't oh I don't I don't think so human

771
00:34:05,309 --> 00:34:10,049
society ever will because we're not

772
00:34:06,750 --> 00:34:14,789
built that way the only way we can do it

773
00:34:10,050 --> 00:34:16,800
is evolved it out of ourselves so I

774
00:34:14,789 --> 00:34:18,539
think I think all we can do is just sort

775
00:34:16,800 --> 00:34:20,250
of keep chipping away as best we can

776
00:34:18,539 --> 00:34:23,460
focus on the things that are really

777
00:34:20,250 --> 00:34:26,610
important but no I don't think it'll

778
00:34:23,460 --> 00:34:28,980
ever really happen interesting I'm sorry

779
00:34:26,610 --> 00:34:30,960
to be so pessimistic no interesting you

780
00:34:28,980 --> 00:34:32,400
can see Tim mendham the editor of the

781
00:34:30,960 --> 00:34:33,869
skeptic magazine and we're looking

782
00:34:32,400 --> 00:34:36,510
forward to the next issue coming out

783
00:34:33,869 --> 00:34:38,579
soon in about a week's time what are

784
00:34:36,510 --> 00:34:40,050

some of the topics so readers can look

785

00:34:38,579 --> 00:34:41,969

forward to well we got a lot of topical

786

00:34:40,050 --> 00:34:43,860

special feature this time on Lord law

787

00:34:41,969 --> 00:34:47,419

and skepticism including an anonymous

788

00:34:43,860 --> 00:34:49,650

article from a secret service person

789

00:34:47,420 --> 00:34:51,990

we're talking about how they apply

790

00:34:49,650 --> 00:34:54,690

skepticism in that profession radical

791

00:34:51,989 --> 00:34:55,949

the law in medicine how doctors and what

792

00:34:54,690 --> 00:34:58,530

they can actually do with people who

793

00:34:55,949 --> 00:35:00,659

want strange things have a good number

794

00:34:58,530 --> 00:35:02,190

of other articles usual sort of weird

795

00:35:00,659 --> 00:35:04,739

and wonderful sort of wacky sort of

796

00:35:02,190 --> 00:35:06,179

selection we've got cargo cults and

797

00:35:04,739 --> 00:35:09,899

we've got what else we got we've got

798

00:35:06,179 --> 00:35:10,919

various real cults and far too many

799
00:35:09,900 --> 00:35:13,289
things to remember off the top my head

800
00:35:10,920 --> 00:35:15,059
is this late in the evening well I'm

801
00:35:13,289 --> 00:35:16,829
actually rather excited to get the next

802
00:35:15,059 --> 00:35:19,619
day I'm issue of the magazine because I

803
00:35:16,829 --> 00:35:22,019
finally got myself an ipad and I plan on

804
00:35:19,619 --> 00:35:23,849
reading it on my lovely new I

805
00:35:22,019 --> 00:35:26,009
did you split the question that we will

806
00:35:23,849 --> 00:35:28,110
human beings ever be totally rational

807
00:35:26,010 --> 00:35:29,040
yes and if so how long will it do you

808
00:35:28,110 --> 00:35:31,680
think it's going to take centuries

809
00:35:29,039 --> 00:35:34,349
decades millennium I think next Tuesday

810
00:35:31,679 --> 00:35:35,969
looks next Tuesday if you're talking all

811
00:35:34,349 --> 00:35:37,440
of them no actually I think it's getting

812
00:35:35,969 --> 00:35:40,049
better look at the number of people who

813
00:35:37,440 --> 00:35:42,450
were actually have no religion it's

814
00:35:40,050 --> 00:35:44,310
growing they might have no religion but

815
00:35:42,449 --> 00:35:46,349
they still there are some other areas

816
00:35:44,309 --> 00:35:47,730
where they can still be irrational I'm

817
00:35:46,349 --> 00:35:49,679
just running in the corners actually

818
00:35:47,730 --> 00:35:51,300
everywhere just corner them down paint

819
00:35:49,679 --> 00:35:52,529
them in the corners and eventually now

820
00:35:51,300 --> 00:35:54,180
there'll always be people who believe

821
00:35:52,530 --> 00:35:55,680
weird things and as soon as your block

822
00:35:54,179 --> 00:35:58,019
off one thing the people turn to

823
00:35:55,679 --> 00:35:59,579
something else it's a supreme art will

824
00:35:58,019 --> 00:36:01,469
be resilient is the belief that people

825
00:35:59,579 --> 00:36:03,690
have when something is a dead end

826
00:36:01,469 --> 00:36:05,429
they'll move on to something else don't

827

00:36:03,690 --> 00:36:08,429
you think the first things we need to do

828
00:36:05,429 --> 00:36:09,539
to actually really change things is to

829
00:36:08,429 --> 00:36:14,039
make it part of our political

830
00:36:09,539 --> 00:36:17,039
conversation and also to to recognize

831
00:36:14,039 --> 00:36:20,250
that we're all like that every single

832
00:36:17,039 --> 00:36:23,380
one of us to the most die-hard skeptic

833
00:36:20,250 --> 00:36:25,239
we have our irrational bits

834
00:36:23,380 --> 00:36:26,230
and until we actually recognize that I

835
00:36:25,239 --> 00:36:28,838
think it's going to be pretty hard to

836
00:36:26,230 --> 00:36:32,289
change one thing you irrational Jones oh

837
00:36:28,838 --> 00:36:36,940
absolutely i find that happily my

838
00:36:32,289 --> 00:36:38,259
husband is right there i could ask so

839
00:36:36,940 --> 00:36:40,599
that's great thank you thank you Jim and

840
00:36:38,259 --> 00:36:42,519
yes the skeptic magazine of course one

841
00:36:40,599 --> 00:36:46,809

of the finest skeptical journals in the

842

00:36:42,518 --> 00:36:49,288

world www.skype.com data you subscribe

843

00:36:46,809 --> 00:36:52,839

online thank you very much you should

844

00:36:49,289 --> 00:36:55,089

shame green up from roberta cod right

845

00:36:52,838 --> 00:36:57,338

calm that's it now what is robot out for

846

00:36:55,088 --> 00:36:59,528

those skeptics on listeners who seek of

847

00:36:57,338 --> 00:37:01,659

remember hearing about it around so it's

848

00:36:59,528 --> 00:37:03,548

a browser extension which basically

849

00:37:01,659 --> 00:37:06,159

alerts you whenever a page that you're

850

00:37:03,548 --> 00:37:08,469

reading has been rebutted elsewhere on

851

00:37:06,159 --> 00:37:11,139

the internet so yeah robotic connects

852

00:37:08,469 --> 00:37:12,578

claims to rebuttals gives you the alert

853

00:37:11,139 --> 00:37:14,528

and allows you to submit your own

854

00:37:12,579 --> 00:37:16,420

rebuttals if you find one its eyes and

855

00:37:14,528 --> 00:37:18,489

in system yet I have to build it in

856
00:37:16,420 --> 00:37:21,130
valuable valuable website now the

857
00:37:18,489 --> 00:37:22,949
question that's going around tonight two

858
00:37:21,130 --> 00:37:25,630
questions really do you think that human

859
00:37:22,949 --> 00:37:29,889
society as a whole will ever turn more

860
00:37:25,630 --> 00:37:30,970
or less to science in reason if so how

861
00:37:29,889 --> 00:37:35,409
long do you think that might take

862
00:37:30,969 --> 00:37:37,719
decades centuries I do think we will but

863
00:37:35,409 --> 00:37:39,969
I'm one of those crazy followers of the

864
00:37:37,719 --> 00:37:42,098
works of Ray Kurzweil and basically

865
00:37:39,969 --> 00:37:44,649
believe in one form or another that the

866
00:37:42,099 --> 00:37:45,910
singularity is coming so I think it's

867
00:37:44,650 --> 00:37:49,710
inevitable the technology will

868
00:37:45,909 --> 00:37:52,420
increasingly become a part of us we will

869
00:37:49,710 --> 00:37:55,740
augment our minds our brains will get

870
00:37:52,420 --> 00:37:58,900
closer and closer to this permanent

871
00:37:55,739 --> 00:38:00,818
interactive connection with the internet

872
00:37:58,900 --> 00:38:02,980
and we will augment not only our

873
00:38:00,818 --> 00:38:04,630
connection to it to the the breadth of

874
00:38:02,980 --> 00:38:06,880
human knowledge but also our ability to

875
00:38:04,630 --> 00:38:10,119
think so we will end up making ourselves

876
00:38:06,880 --> 00:38:12,278
so logical and rational that will feel

877
00:38:10,119 --> 00:38:14,528
stupid to do anything but apply that

878
00:38:12,278 --> 00:38:15,579
rationality and how long I think that'll

879
00:38:14,528 --> 00:38:17,840
take I think it would be less than a

880
00:38:15,579 --> 00:38:19,610
hundred years Wow

881
00:38:17,840 --> 00:38:20,840
I must admit when somebody put this

882
00:38:19,610 --> 00:38:22,400
question to me a very good friend of

883
00:38:20,840 --> 00:38:25,400
mine by the name of Philip us coffee

884

00:38:22,400 --> 00:38:27,500
hello Philip you listening i agreed that

885
00:38:25,400 --> 00:38:29,570
i thought yeah of n chua lee i think we

886
00:38:27,500 --> 00:38:32,869
will but I gave it about two centuries

887
00:38:29,570 --> 00:38:36,320
yeah I think um and of course I this all

888
00:38:32,869 --> 00:38:38,299
has to be tempered with based on

889
00:38:36,320 --> 00:38:40,220
believing reycarts all sort of arguments

890
00:38:38,300 --> 00:38:42,860
and there's lots of there's a lot to

891
00:38:40,219 --> 00:38:45,649
criticisms of them but this is my

892
00:38:42,860 --> 00:38:50,630
current belief happy to be challenged on

893
00:38:45,650 --> 00:38:52,820
it there was another thing it's also

894
00:38:50,630 --> 00:38:55,340
even in that that's actually chances

895
00:38:52,820 --> 00:38:57,289
either won't be everyone it may actually

896
00:38:55,340 --> 00:38:59,269
be the case you will always get the the

897
00:38:57,289 --> 00:39:02,300
people that refuse technology and and

898
00:38:59,269 --> 00:39:04,880

will live in a natural state there will

899

00:39:02,300 --> 00:39:07,250

be the naturals so who knows you know

900

00:39:04,880 --> 00:39:10,070

I'm sorry I'm really reminded of a brave

901

00:39:07,250 --> 00:39:12,679

new world now yeah it may be a look like

902

00:39:10,070 --> 00:39:14,840

that he's got a simple simons savage and

903

00:39:12,679 --> 00:39:19,239

i haven't read it for many years I've

904

00:39:14,840 --> 00:39:19,240

got it on my bookshelf my dad to read it

905

00:39:19,780 --> 00:39:24,430

well things are quieting down a little

906

00:39:22,039 --> 00:39:26,719

bit now and I found Jessica singer a

907

00:39:24,429 --> 00:39:28,730

secretary of Australian skeptics hello

908

00:39:26,719 --> 00:39:31,929

Jessica hey Richard how are you going

909

00:39:28,730 --> 00:39:35,510

I'm sorry well I can hardly believe it

910

00:39:31,929 --> 00:39:37,129

I'm skeptical about our where I am now

911

00:39:35,510 --> 00:39:40,040

the questions now it's sort of like two

912

00:39:37,130 --> 00:39:43,430

questions in one do you think the human

913
00:39:40,039 --> 00:39:45,949
society will ever generally or on the

914
00:39:43,429 --> 00:39:48,159
whole turn to sign some reason and if so

915
00:39:45,949 --> 00:39:50,989
how long do you think that might take ah

916
00:39:48,159 --> 00:39:52,940
well I think my answer to the first

917
00:39:50,989 --> 00:39:55,719
question sort of renders the second

918
00:39:52,940 --> 00:39:58,550
question obsolete oh I don't think

919
00:39:55,719 --> 00:40:00,559
unfortunately I don't think human

920
00:39:58,550 --> 00:40:03,080
society is going to turn to science and

921
00:40:00,559 --> 00:40:05,539
reason I I actually don't think we're

922
00:40:03,079 --> 00:40:07,179
made that way and I think somebody like

923
00:40:05,539 --> 00:40:09,068
Christie Wilson

924
00:40:07,179 --> 00:40:11,558
who you've no doubt had on the zone

925
00:40:09,068 --> 00:40:13,659
before oh yes she's our roving reporter

926
00:40:11,559 --> 00:40:16,030
and there you go and she's doing a lot

927
00:40:13,659 --> 00:40:17,828
of work in this area and you know why

928
00:40:16,030 --> 00:40:21,339
people believe things and why people

929
00:40:17,829 --> 00:40:24,280
believe weird things and yeah I think I

930
00:40:21,338 --> 00:40:26,349
think what's interesting is you know why

931
00:40:24,280 --> 00:40:30,010
humans have this tendency and why we

932
00:40:26,349 --> 00:40:33,010
made that way and and yo so I'm very

933
00:40:30,010 --> 00:40:35,890
interested in her work but I don't think

934
00:40:33,010 --> 00:40:39,220
there's a fantastic prospect for

935
00:40:35,889 --> 00:40:41,889
Humanity generally I Deary Deary Deary

936
00:40:39,219 --> 00:40:43,989
me I know it doesn't sound depressing

937
00:40:41,889 --> 00:40:46,239
that hey you know life is fun and you

938
00:40:43,989 --> 00:40:48,759
can have a great a great time along the

939
00:40:46,239 --> 00:40:51,219
way and I do and skeptics know how to

940
00:40:48,760 --> 00:40:52,720
party we do it's interesting Jesse

941

00:40:51,219 --> 00:40:54,669
because I asked the same question to

942
00:40:52,719 --> 00:40:57,639
some people tonight including Joe

943
00:40:54,670 --> 00:41:00,460
minimal now the interesting thing is the

944
00:40:57,639 --> 00:41:02,078
females i asked give the pessimistic ad

945
00:41:00,460 --> 00:41:06,010
said the male's give the optimistic

946
00:41:02,079 --> 00:41:07,720
answer oh that's actually so far yeah

947
00:41:06,010 --> 00:41:10,170
that's really interesting maybe Chrissy

948
00:41:07,719 --> 00:41:13,808
Wilson should have a look at that mmm

949
00:41:10,170 --> 00:41:15,760
there's a thought yeah well that that's

950
00:41:13,809 --> 00:41:18,160
really interesting and I could not I

951
00:41:15,760 --> 00:41:20,740
could not even begin to speculate why

952
00:41:18,159 --> 00:41:23,730
that would be it's a very small sample

953
00:41:20,739 --> 00:41:26,759
size this is true the small sample size

954
00:41:23,730 --> 00:41:30,608
hardly representative and not

955
00:41:26,760 --> 00:41:33,099

statistically significant I am forced to

956

00:41:30,608 --> 00:41:36,639

agree I'd better ask somebody else good

957

00:41:33,099 --> 00:41:39,660

one see you later and the question

958

00:41:36,639 --> 00:41:43,179

tonight of course is do you think that

959

00:41:39,659 --> 00:41:44,798

someday human society as a whole will

960

00:41:43,179 --> 00:41:47,558

turn to the side of science and reason

961

00:41:44,798 --> 00:41:48,780

and if so how long do you think that

962

00:41:47,559 --> 00:41:50,490

would take

963

00:41:48,780 --> 00:41:52,260

I learnt expected to happen in a hurry

964

00:41:50,489 --> 00:41:54,449

because I think people have an instinct

965

00:41:52,260 --> 00:41:57,000

to find patterns where there aren't any

966

00:41:54,449 --> 00:42:00,359

patterns and do whatever will make it

967

00:41:57,000 --> 00:42:02,309

you know require less effort to think so

968

00:42:00,360 --> 00:42:04,710

I think people always want easy answers

969

00:42:02,309 --> 00:42:06,409

prefer something's lean mystical rather

970
00:42:04,710 --> 00:42:09,539
than things to be determined through

971
00:42:06,409 --> 00:42:11,609
deduction and very careful analysis

972
00:42:09,539 --> 00:42:13,380
because that requires effort so I think

973
00:42:11,610 --> 00:42:15,349
it takes an active effort to educate

974
00:42:13,380 --> 00:42:17,789
people to think scientifically

975
00:42:15,349 --> 00:42:19,730
analytically to look for evidence for

976
00:42:17,789 --> 00:42:23,369
things such to think critically and

977
00:42:19,730 --> 00:42:25,019
based on that I think there are reasons

978
00:42:23,369 --> 00:42:26,940
why humans evolved to draw conclusions

979
00:42:25,019 --> 00:42:29,759
quickly back when we were you know

980
00:42:26,940 --> 00:42:31,980
living you know like cavemen in the wild

981
00:42:29,760 --> 00:42:35,700
you know yet to adapt to threats of wild

982
00:42:31,980 --> 00:42:37,619
animals you know and those instincts and

983
00:42:35,699 --> 00:42:39,389
take a while to go away I don't know

984
00:42:37,619 --> 00:42:40,619
whether they'll go away from evolutionary

985
00:42:39,389 --> 00:42:42,989
because we'll have an education system

986
00:42:40,619 --> 00:42:47,009
that instills them is so thoroughly from

987
00:42:42,989 --> 00:42:48,750
a young age but yeah I think I I reckon

988
00:42:47,010 --> 00:42:51,920
lino centuries I'm not going to be an

989
00:42:48,750 --> 00:42:58,079
optimist it's um it'll be a struggle

990
00:42:51,920 --> 00:43:00,480
good answer thank you a gauge boson yes

991
00:42:58,079 --> 00:43:01,829
but sometimes you get three gluons

992
00:43:00,480 --> 00:43:03,900
holding three quarks together then

993
00:43:01,829 --> 00:43:05,909
you've got a present or a neutron folks

994
00:43:03,900 --> 00:43:07,800
that the conversations that skeptics in

995
00:43:05,909 --> 00:43:09,599
the pub just boggled my mind it's ian

996
00:43:07,800 --> 00:43:11,400
Bryce the chief investigator from

997
00:43:09,599 --> 00:43:14,279
destroying skeptics Ian what are you

998

00:43:11,400 --> 00:43:18,930
raving it I'm talking about our entry in

999
00:43:14,280 --> 00:43:20,400
the Mardi Gras 2013 well and you got

1000
00:43:18,929 --> 00:43:22,409
some photographs there can you just

1001
00:43:20,400 --> 00:43:24,480
throw it is can you briefly explain what

1002
00:43:22,409 --> 00:43:26,069
was the float who was the float and what

1003
00:43:24,480 --> 00:43:28,289
all about okay the float was called the

1004
00:43:26,070 --> 00:43:30,240
Higgs boson the godless particle because

1005
00:43:28,289 --> 00:43:32,429
the haha of course the media dubbed it

1006
00:43:30,239 --> 00:43:34,559
the god particle but atheists know it's

1007
00:43:32,429 --> 00:43:36,329
the godless particle and the aim was to

1008
00:43:34,559 --> 00:43:38,358
celebrate the discovery of the decade

1009
00:43:36,329 --> 00:43:42,000
the scientific discovery of the decade

1010
00:43:38,358 --> 00:43:43,590
and also we color and motion involved

1011
00:43:42,000 --> 00:43:45,329
each person participating was an

1012
00:43:43,590 --> 00:43:47,730

elementary particle of quark or

1013

00:43:45,329 --> 00:43:50,599

electronic we're on or photon on so

1014

00:43:47,730 --> 00:43:54,000

forth and also they form relationships

1015

00:43:50,599 --> 00:43:55,559

as in human relationships so during the

1016

00:43:54,000 --> 00:43:57,389

choreography the particles joined

1017

00:43:55,559 --> 00:44:00,239

together in ones and twos and threes

1018

00:43:57,389 --> 00:44:02,400

much like humans do mixed couples and

1019

00:44:00,239 --> 00:44:03,989

opposite couples and same couples and

1020

00:44:02,400 --> 00:44:06,329

triples and so forth so we drew

1021

00:44:03,989 --> 00:44:08,250

parallels between the theme of the Mardi

1022

00:44:06,329 --> 00:44:10,139

Gras which is all the different sexual

1023

00:44:08,250 --> 00:44:11,849

orientations and the way elementary

1024

00:44:10,139 --> 00:44:14,039

particles relate I think the audience

1025

00:44:11,849 --> 00:44:15,960

loved that and it looks it looks

1026

00:44:14,039 --> 00:44:18,480

spectacular you've got lots of lanterns

1027
00:44:15,960 --> 00:44:20,429
and people with giant sort of plastic

1028
00:44:18,480 --> 00:44:22,260
slinkies and marching along and there

1029
00:44:20,429 --> 00:44:24,179
there are you sitting up on the back of

1030
00:44:22,260 --> 00:44:26,130
a truck directing the action yes I was

1031
00:44:24,179 --> 00:44:30,029
the Higgs boson I was giving directions

1032
00:44:26,130 --> 00:44:31,619
to the both the audience from the sides

1033
00:44:30,030 --> 00:44:33,390
who wanted to know what was going on and

1034
00:44:31,619 --> 00:44:34,680
also to the dancers who wanted to know

1035
00:44:33,389 --> 00:44:36,868
which part of the choreography was

1036
00:44:34,679 --> 00:44:39,000
coming next so I was holding up cue

1037
00:44:36,869 --> 00:44:41,730
cards and making announcements now he in

1038
00:44:39,000 --> 00:44:43,889
something completely different to what

1039
00:44:41,730 --> 00:44:45,960
we've been discussing tonight I happen

1040
00:44:43,889 --> 00:44:48,809
to notice you told me and I've known

1041
00:44:45,960 --> 00:44:50,539
your dog for many years safi sapphire

1042
00:44:48,809 --> 00:44:54,509
sapphire

1043
00:44:50,539 --> 00:44:56,940
she is an elderly dog who has been going

1044
00:44:54,510 --> 00:44:58,740
blind and was blind for a few years but

1045
00:44:56,940 --> 00:45:01,950
Thank You science Thank You science

1046
00:44:58,739 --> 00:45:04,049
she's can now see you again yes indeed

1047
00:45:01,949 --> 00:45:07,769
she got cataracts in both eyes and was

1048
00:45:04,050 --> 00:45:09,390
totally blind for about a year and lost

1049
00:45:07,769 --> 00:45:11,489
a lot of interest in life but just

1050
00:45:09,389 --> 00:45:13,589
recently science to the rescue she's had

1051
00:45:11,489 --> 00:45:16,349
one eye out and one knew I were at least

1052
00:45:13,590 --> 00:45:18,059
one new lens in there I and she's

1053
00:45:16,349 --> 00:45:21,059
responded quite strange you came

1054
00:45:18,059 --> 00:45:22,500
hyperactive running around looking left

1055

00:45:21,059 --> 00:45:24,480
and right and examining everything

1056
00:45:22,500 --> 00:45:26,340
obviously enjoying life a lot more can

1057
00:45:24,480 --> 00:45:28,590
run now because a blind dog can't run

1058
00:45:26,340 --> 00:45:30,240
because going to bump into things and

1059
00:45:28,590 --> 00:45:32,130
strangely enough her appetite has

1060
00:45:30,239 --> 00:45:34,589
doubled which we can only put down to

1061
00:45:32,130 --> 00:45:37,200
the extra exercise she's getting an

1062
00:45:34,590 --> 00:45:38,640
extra interest in life such as it's

1063
00:45:37,199 --> 00:45:40,439
really been quite wonderful and just

1064
00:45:38,639 --> 00:45:42,569
shows you the wonders of science that's

1065
00:45:40,440 --> 00:45:44,369
great because i know that dog is a

1066
00:45:42,570 --> 00:45:46,890
lovely dog you've had for many years and

1067
00:45:44,369 --> 00:45:48,569
to think that now it can see again after

1068
00:45:46,889 --> 00:45:51,089
a couple of years of blindness is just

1069
00:45:48,570 --> 00:45:52,590

just fantastic yes it certainly is she

1070

00:45:51,090 --> 00:45:56,240

probably thinks well that was a bloody

1071

00:45:52,590 --> 00:45:56,240

long night but thank goodness it's over

1072

00:45:58,010 --> 00:46:03,180

Kathy marks journalists know what do you

1073

00:46:00,659 --> 00:46:04,889

think my brain is working very slowly

1074

00:46:03,179 --> 00:46:05,869

tonight because I've just been I hope

1075

00:46:04,889 --> 00:46:08,339

another day off for about three weeks

1076

00:46:05,869 --> 00:46:09,539

but off the top of my head I would say

1077

00:46:08,340 --> 00:46:10,530

no I don't think that they will

1078

00:46:09,539 --> 00:46:12,630

eventually turn slanting rays

1079

00:46:10,530 --> 00:46:14,010

unfortunately I just I just don't I feel

1080

00:46:12,630 --> 00:46:16,590

more am I think that more and more

1081

00:46:14,010 --> 00:46:18,780

people are attracted to mumbo-jumbo you

1082

00:46:16,590 --> 00:46:21,030

know pseudoscience myths all that

1083

00:46:18,780 --> 00:46:22,700

rubbish why because probably turning

1084
00:46:21,030 --> 00:46:25,410
away from religion and you know

1085
00:46:22,699 --> 00:46:27,750
world-changing globalization blah blah

1086
00:46:25,409 --> 00:46:28,949
bar and they see this sort of stuff for

1087
00:46:27,750 --> 00:46:32,190
something to cling onto now that's just

1088
00:46:28,949 --> 00:46:33,689
a very kind of you know you feel

1089
00:46:32,190 --> 00:46:36,099
response from me but

1090
00:46:33,690 --> 00:46:37,269
it's interesting I've got some very

1091
00:46:36,099 --> 00:46:40,480
interesting answers to that question

1092
00:46:37,268 --> 00:46:42,159
when it was asked of me I answered more

1093
00:46:40,480 --> 00:46:43,659
or less in the positive that's what I

1094
00:46:42,159 --> 00:46:45,578
thought it might take a couple centuries

1095
00:46:43,659 --> 00:46:48,699
you thought it might take a couple of

1096
00:46:45,579 --> 00:46:51,849
centuries oh I just call it that far

1097
00:46:48,699 --> 00:46:55,929
ahead it is difficult in this difficult

1098
00:46:51,849 --> 00:46:58,000
oh it's almost it's almost closing time

1099
00:46:55,929 --> 00:47:00,969
at the pub there's a few scrag leurs and

1100
00:46:58,000 --> 00:47:04,809
hangers-on hello hi and who do we have

1101
00:47:00,969 --> 00:47:07,239
here I'm Emma Marcum from the UK just

1102
00:47:04,809 --> 00:47:09,760
visiting um I'm actually over here

1103
00:47:07,239 --> 00:47:12,159
working for a year excellent having a

1104
00:47:09,760 --> 00:47:15,099
good time at home yes it's it's really

1105
00:47:12,159 --> 00:47:17,920
amazing i'm loving sydney oh that's so

1106
00:47:15,099 --> 00:47:20,039
nice to hear and what brings you out

1107
00:47:17,920 --> 00:47:22,358
here what are you working at so

1108
00:47:20,039 --> 00:47:24,430
originally my motivation for coming here

1109
00:47:22,358 --> 00:47:27,088
is I was working in clinical trials in

1110
00:47:24,429 --> 00:47:29,588
the UK and I was starting getting a bit

1111
00:47:27,088 --> 00:47:31,719
disillusioned by it all and wanted to

1112

00:47:29,588 --> 00:47:34,358
try something new and I i understood

1113
00:47:31,719 --> 00:47:38,139
that Australia is an exciting place for

1114
00:47:34,358 --> 00:47:40,358
scientists and you're not experienced

1115
00:47:38,139 --> 00:47:42,098
the same same same kind of a recession

1116
00:47:40,358 --> 00:47:43,929
that Europe is in at the moment so I

1117
00:47:42,099 --> 00:47:46,630
thought I should come out here for new

1118
00:47:43,929 --> 00:47:48,190
opportunities really what a great idea

1119
00:47:46,630 --> 00:47:50,349
what there you are folks there's the

1120
00:47:48,190 --> 00:47:51,970
word come out to Australia for new

1121
00:47:50,349 --> 00:47:53,680
opportunities now why you're here and

1122
00:47:51,969 --> 00:47:54,639
I'm so pleased to see you at skeptics in

1123
00:47:53,679 --> 00:47:56,889
the pub and I hope you've had a good

1124
00:47:54,639 --> 00:47:58,929
time yes it's been amazing it's kind of

1125
00:47:56,889 --> 00:48:01,900
an interesting contrast between the

1126
00:47:58,929 --> 00:48:05,768

skeptics movement in the UK where it's a

1127

00:48:01,900 --> 00:48:07,599

very casual in the pub and they do a

1128

00:48:05,768 --> 00:48:09,008

little presentation it's sort of very

1129

00:48:07,599 --> 00:48:12,068

interesting that you also include a

1130

00:48:09,009 --> 00:48:16,329

dinner and I think the talks are sort of

1131

00:48:12,068 --> 00:48:17,829

more sort of based on Australian ideas

1132

00:48:16,329 --> 00:48:19,329

and current issues and I think that

1133

00:48:17,829 --> 00:48:20,740

that's really interesting to sort of get

1134

00:48:19,329 --> 00:48:23,890

a better understanding of the country

1135

00:48:20,739 --> 00:48:26,389

and how skepticism works in Australia

1136

00:48:23,889 --> 00:48:28,098

delighted to hear now the question

1137

00:48:26,389 --> 00:48:30,918

tonight will sort of like two questions

1138

00:48:28,099 --> 00:48:33,619

in one do you think that human society

1139

00:48:30,918 --> 00:48:36,558

in general will ever eventually turn the

1140

00:48:33,619 --> 00:48:40,489

science and reason and if so how long do

1141
00:48:36,559 --> 00:48:42,739
you think that might take I think that

1142
00:48:40,489 --> 00:48:45,188
there is certainly propensity to to move

1143
00:48:42,739 --> 00:48:47,719
towards reason especially when you

1144
00:48:45,188 --> 00:48:50,538
provide the facts and information and

1145
00:48:47,719 --> 00:48:55,479
education but also I think people are

1146
00:48:50,539 --> 00:48:57,528
easily deceived and led astray by

1147
00:48:55,478 --> 00:48:59,748
pseudoscience and things that seem to

1148
00:48:57,528 --> 00:49:02,108
add up but then really don't so I think

1149
00:48:59,748 --> 00:49:05,568
it will take a long time the sin Leah a

1150
00:49:02,108 --> 00:49:08,719
movement towards more chicken reasoning

1151
00:49:05,568 --> 00:49:10,969
I definitely agree that there is we can

1152
00:49:08,719 --> 00:49:13,699
see that in the UK where now the latest

1153
00:49:10,969 --> 00:49:15,648
census has indicated that twenty five

1154
00:49:13,699 --> 00:49:17,929
percent of the population don't believe

1155
00:49:15,648 --> 00:49:19,518
in any God or any religious figure so

1156
00:49:17,929 --> 00:49:22,159
that would indicate that sort of

1157
00:49:19,518 --> 00:49:24,348
everything is moving more to a logical

1158
00:49:22,159 --> 00:49:26,059
and reasoning basis and as science is

1159
00:49:24,349 --> 00:49:29,028
moving forward people are getting more

1160
00:49:26,059 --> 00:49:31,249
educated in what is real and and what is

1161
00:49:29,028 --> 00:49:34,278
not and being able to explain what what

1162
00:49:31,248 --> 00:49:36,018
is it real recently you know things like

1163
00:49:34,278 --> 00:49:38,148
you know hallucinations can now be

1164
00:49:36,018 --> 00:49:41,868
explained like as a mental thing rather

1165
00:49:38,148 --> 00:49:44,630
than you know rather than a mystical God

1166
00:49:41,869 --> 00:49:45,949
yeah so absolutely i think it's going to

1167
00:49:44,630 --> 00:49:47,539
take a long time but i think that

1168
00:49:45,949 --> 00:49:50,269
there's definitely signals that it's

1169

00:49:47,539 --> 00:49:53,569
it's moving that way that's very

1170
00:49:50,268 --> 00:49:57,198
positive banter and what time frame are

1171
00:49:53,568 --> 00:49:59,418
we looking at decades centuries I'd say

1172
00:49:57,199 --> 00:50:02,659
definitely decades I'd like to be more

1173
00:49:59,418 --> 00:50:05,328
positive than four centuries I mean but

1174
00:50:02,659 --> 00:50:07,729
if we compare you know how things were

1175
00:50:05,329 --> 00:50:11,149
in you know a hundred years ago we've

1176
00:50:07,728 --> 00:50:13,518
moved you know huge leaps and bounds

1177
00:50:11,148 --> 00:50:15,828
forward and especially you know as we

1178
00:50:13,518 --> 00:50:18,288
improve in technology and everyone

1179
00:50:15,829 --> 00:50:20,580
starts to get a better level education

1180
00:50:18,289 --> 00:50:23,040
and understanding about technology

1181
00:50:20,579 --> 00:50:24,750
we start to sort of debunk all the

1182
00:50:23,039 --> 00:50:26,159
things that we used to believe in so I

1183
00:50:24,750 --> 00:50:28,920

think it's going to get faster and

1184

00:50:26,159 --> 00:50:31,920

faster hopefully exponential but don't

1185

00:50:28,920 --> 00:50:33,420

quote me but you know I'd like to I'd

1186

00:50:31,920 --> 00:50:36,119

like to think that it's in the next two

1187

00:50:33,420 --> 00:50:38,639

decades that we would be able to get rid

1188

00:50:36,119 --> 00:50:40,259

of ideas such as homeopathy and

1189

00:50:38,639 --> 00:50:42,809

chiropractors and things like that and

1190

00:50:40,260 --> 00:50:45,540

get to more of a you know a factual

1191

00:50:42,809 --> 00:50:48,029

basis and you know science basis for all

1192

00:50:45,539 --> 00:50:50,190

the decisions we make I certainly hope

1193

00:50:48,030 --> 00:50:52,050

so now what part of the UK you from I'm

1194

00:50:50,190 --> 00:50:55,110

originally from Cambridge but I mostly

1195

00:50:52,050 --> 00:50:56,970

live and work in London how long have

1196

00:50:55,110 --> 00:50:59,910

you been in Australia now I've just

1197

00:50:56,969 --> 00:51:01,469

moved to australia in december so only

1198
00:50:59,909 --> 00:51:02,699
been here a couple of month old you know

1199
00:51:01,469 --> 00:51:05,429
you've already picked up a little

1200
00:51:02,699 --> 00:51:07,319
Australian action yes I'm sorry I

1201
00:51:05,429 --> 00:51:10,589
haven't have to apologize for it the

1202
00:51:07,320 --> 00:51:12,420
local influence what can I say lovely to

1203
00:51:10,590 --> 00:51:16,440
see you with your double helix earrings

1204
00:51:12,420 --> 00:51:19,349
yes thank you I i I'm very passionate

1205
00:51:16,440 --> 00:51:21,720
about science and I just really love and

1206
00:51:19,349 --> 00:51:25,139
enjoy it so much that i find it inspires

1207
00:51:21,719 --> 00:51:28,489
me and and yeah i really love being here

1208
00:51:25,139 --> 00:51:28,489
it's very exciting place to be

1209
00:51:42,460 --> 00:51:47,030
this is ben Radford I'm deputy editor of

1210
00:51:45,440 --> 00:51:49,070
skeptical inquirer science magazine

1211
00:51:47,030 --> 00:51:50,990
author of six books including tracking

1212
00:51:49,070 --> 00:51:54,850
chupacabra and you can find out more

1213
00:51:50,989 --> 00:51:54,849
about me at Benjamin Radford com

1214
00:52:12,460 --> 00:52:16,670
well I'm here would want us Bay people

1215
00:52:15,019 --> 00:52:18,259
and I could not be more excited in my

1216
00:52:16,670 --> 00:52:21,079
little small pants because I'm actually

1217
00:52:18,260 --> 00:52:22,760
touching at this very moment a DeLorean

1218
00:52:21,079 --> 00:52:25,340
that's right there's only a couple of

1219
00:52:22,760 --> 00:52:26,360
them around and this is an electric one

1220
00:52:25,340 --> 00:52:27,860
I mean a lot of people talk about

1221
00:52:26,360 --> 00:52:29,420
science a lot of people talk a big game

1222
00:52:27,860 --> 00:52:30,950
about science but here's a guy is

1223
00:52:29,420 --> 00:52:33,680
actually done something for science and

1224
00:52:30,949 --> 00:52:36,139
turned a DeLorean car into an electric

1225
00:52:33,679 --> 00:52:38,059
DeLorean car who are you and why would

1226

00:52:36,139 --> 00:52:39,409
you do a crazy thing like this ok my

1227
00:52:38,059 --> 00:52:41,630
name is Brett Sutherland from solar

1228
00:52:39,409 --> 00:52:43,429
power shreya other reason is I've always

1229
00:52:41,630 --> 00:52:45,320
had a passion for the DeLorean probably

1230
00:52:43,429 --> 00:52:48,349
since the movies back to the future

1231
00:52:45,320 --> 00:52:51,170
movies and also order to to build

1232
00:52:48,349 --> 00:52:52,730
electric car so it's hard to do both but

1233
00:52:51,170 --> 00:52:54,019
this is like for some people this could

1234
00:52:52,730 --> 00:52:55,969
be sacrilege it could be could be like a

1235
00:52:54,019 --> 00:52:57,500
Ferrari Enzo like ripping out the engine

1236
00:52:55,969 --> 00:52:58,939
and putting something in did you have to

1237
00:52:57,500 --> 00:53:00,619
think deep and long about this because

1238
00:52:58,940 --> 00:53:02,269
if you has the value of the kind of been

1239
00:53:00,619 --> 00:53:03,980
affected by turning into an electric one

1240
00:53:02,269 --> 00:53:05,900

well there's a couple of points here

1241
00:53:03,980 --> 00:53:07,730
like one of my mates is exactly like

1242
00:53:05,900 --> 00:53:10,190
that he was pretty well against be

1243
00:53:07,730 --> 00:53:12,289
pulling the motor out with the blah does

1244
00:53:10,190 --> 00:53:13,550
he drive butter HQ Kingswood no he's in

1245
00:53:12,289 --> 00:53:15,409
the Mustangs and things like that but

1246
00:53:13,550 --> 00:53:16,460
like I said HQ kids would yeah just what

1247
00:53:15,409 --> 00:53:18,170
a bigger motor on a different shape

1248
00:53:16,460 --> 00:53:20,630
that's right but in one day is an

1249
00:53:18,170 --> 00:53:23,210
American Mustangs a girl's car exactly

1250
00:53:20,630 --> 00:53:24,950
but here's against it as long with a lot

1251
00:53:23,210 --> 00:53:27,079
of other people but he's now seen the

1252
00:53:24,949 --> 00:53:29,000
vehicle and realizes it was done well

1253
00:53:27,079 --> 00:53:31,279
and it's actually improved the vehicle

1254
00:53:29,000 --> 00:53:33,739
and the motor it was in indy car wasn't

1255
00:53:31,280 --> 00:53:35,840
that powerful I cuz a 2.8 liter v6 which

1256
00:53:33,739 --> 00:53:38,299
was about 130 horsepower and there was a

1257
00:53:35,840 --> 00:53:40,490
lotus engine it was a puja renauld

1258
00:53:38,300 --> 00:53:43,519
evolve our engine so prv they called it

1259
00:53:40,489 --> 00:53:45,469
well okay so where did you find one as

1260
00:53:43,519 --> 00:53:47,210
far as i know very few were sold in this

1261
00:53:45,469 --> 00:53:49,519
country and there was an expensive

1262
00:53:47,210 --> 00:53:52,460
process well there's a guy who imports

1263
00:53:49,519 --> 00:53:54,230
us cars to sell and and make a little

1264
00:53:52,460 --> 00:53:56,389
bit of money for charities he actually

1265
00:53:54,230 --> 00:53:58,519
brought it in and pre much too soon as a

1266
00:53:56,389 --> 00:54:00,379
gaudy I bought it off him so I found it

1267
00:53:58,519 --> 00:54:02,239
they sort of valued around forty to

1268
00:54:00,380 --> 00:54:04,760
fifty thousand dollars for for a car in

1269
00:54:02,239 --> 00:54:06,379
a standard form and it was spent

1270
00:54:04,760 --> 00:54:08,000
probably about fifty or sixty thousand

1271
00:54:06,380 --> 00:54:09,380
dollars converting it now did you get

1272
00:54:08,000 --> 00:54:10,880
the thing where you put the banana on

1273
00:54:09,380 --> 00:54:12,170
top and it turns it into fusion and you

1274
00:54:10,880 --> 00:54:14,720
can just drive away like in the movie

1275
00:54:12,170 --> 00:54:16,550
know yet what didn't have a mr. fusion

1276
00:54:14,719 --> 00:54:19,089
with it not yet but maybe it's something

1277
00:54:16,550 --> 00:54:21,830
could add but now i'm looking here and

1278
00:54:19,090 --> 00:54:23,990
because i know i believe the technical

1279
00:54:21,829 --> 00:54:26,659
term is if I about convert

1280
00:54:23,989 --> 00:54:28,459
a car to electric what was the main

1281
00:54:26,659 --> 00:54:29,899
challenge I mean to me you've got a huge

1282
00:54:28,460 --> 00:54:30,710
area in the front here where you could

1283

00:54:29,900 --> 00:54:32,630
put something is that where the

1284
00:54:30,710 --> 00:54:34,940
batteries ago there are some batteries

1285
00:54:32,630 --> 00:54:36,710
in the front Richard did this room in

1286
00:54:34,940 --> 00:54:38,300
the boot unlike a lot of electric cars

1287
00:54:36,710 --> 00:54:40,220
particularly the mini that was converted

1288
00:54:38,300 --> 00:54:41,570
to electric reason later there's room in

1289
00:54:40,219 --> 00:54:43,189
the boot here that's right well we

1290
00:54:41,570 --> 00:54:44,990
actually the only thing we took it out

1291
00:54:43,190 --> 00:54:46,220
was a spare wheel well so we cut that

1292
00:54:44,989 --> 00:54:47,959
section out so the batteries are

1293
00:54:46,219 --> 00:54:50,269
actually in there there's more batteries

1294
00:54:47,960 --> 00:54:52,519
in the back and essentially it's got so

1295
00:54:50,269 --> 00:54:54,679
there are spaces I had before but

1296
00:54:52,519 --> 00:54:56,750
obviously you would never go drag racing

1297
00:54:54,679 --> 00:54:59,599

in this or exceed the speed limit but if

1298

00:54:56,750 --> 00:55:02,449

someone was in a fictitious situation to

1299

00:54:59,599 --> 00:55:05,000

do that what are you not 100 and

1300

00:55:02,449 --> 00:55:06,710

possibly a top speed that possibly a car

1301

00:55:05,000 --> 00:55:09,260

like this could obtain in a fictional

1302

00:55:06,710 --> 00:55:10,670

condition well I would guess like

1303

00:55:09,260 --> 00:55:12,770

standard it would have done a bit not

1304

00:55:10,670 --> 00:55:13,820

110 seconds which is not very impressive

1305

00:55:12,769 --> 00:55:16,909

but I think it'll be more like seven

1306

00:55:13,820 --> 00:55:18,350

alright maybe they're so haven't tried

1307

00:55:16,909 --> 00:55:19,819

it yet but it does pull a lot harder

1308

00:55:18,349 --> 00:55:21,110

than it used to and of course the

1309

00:55:19,820 --> 00:55:23,990

deloreans known as the Back to the

1310

00:55:21,110 --> 00:55:25,160

Future car but it's also very unusual

1311

00:55:23,989 --> 00:55:26,539

because as far as I know there aren't

1312
00:55:25,159 --> 00:55:29,269
many cars that have a stainless steel

1313
00:55:26,539 --> 00:55:30,619
body now that's right this has got the

1314
00:55:29,269 --> 00:55:32,480
stainless steel outer shell which

1315
00:55:30,619 --> 00:55:35,300
actually is could be doesn't require any

1316
00:55:32,480 --> 00:55:38,000
paintwork and yeah this cars 30 years

1317
00:55:35,300 --> 00:55:39,680
older still looks quite good I was a

1318
00:55:38,000 --> 00:55:42,079
good design and the idea was to replace

1319
00:55:39,679 --> 00:55:44,629
panels in lieu of repair them now of

1320
00:55:42,079 --> 00:55:46,099
course stainless steel is heavier than

1321
00:55:44,630 --> 00:55:48,019
what you would normally have on the body

1322
00:55:46,099 --> 00:55:49,940
so as that made the car heavier overall

1323
00:55:48,019 --> 00:55:51,858
because of the stainless steel body no

1324
00:55:49,940 --> 00:55:54,320
because the style still so strong it's

1325
00:55:51,858 --> 00:55:56,750
really thin and the body itself actually

1326
00:55:54,320 --> 00:55:58,609
made of fiberglass so the stainless

1327
00:55:56,750 --> 00:56:00,769
steel is just an outer outer shell for

1328
00:55:58,608 --> 00:56:02,779
appearance yeah we probably driving down

1329
00:56:00,769 --> 00:56:04,730
the shops is that you get bow that point

1330
00:56:02,780 --> 00:56:06,260
absolutely it takes a lot longer to go

1331
00:56:04,730 --> 00:56:08,389
anywhere and say the reason any guy

1332
00:56:06,260 --> 00:56:10,700
modifies any car is to get the chicks so

1333
00:56:08,389 --> 00:56:13,519
how does it go well it seems to work it

1334
00:56:10,699 --> 00:56:15,049
types of blokes too unfortunately it

1335
00:56:13,519 --> 00:56:16,460
just gets everybody and you just kind of

1336
00:56:15,050 --> 00:56:18,109
got to work your way through the crowd

1337
00:56:16,460 --> 00:56:20,990
take a number people that's the way it's

1338
00:56:18,108 --> 00:56:22,519
got to go and of course you get the yes

1339
00:56:20,989 --> 00:56:24,199
that would be into lowering is used in

1340

00:56:22,519 --> 00:56:26,179
the yet you get a lot of gigs coming up

1341
00:56:24,199 --> 00:56:28,039
to a lot of a shooter scientists yeah

1342
00:56:26,179 --> 00:56:29,868
it's quite funny what you see see geek

1343
00:56:28,039 --> 00:56:32,179
still sort of red laughing and other

1344
00:56:29,869 --> 00:56:33,410
people just point and yeah this it's the

1345
00:56:32,179 --> 00:56:34,699
same reason why I like the car it's

1346
00:56:33,409 --> 00:56:36,739
basically it's got some sort of traction

1347
00:56:34,699 --> 00:56:37,279
about it that ever just says yeah I

1348
00:56:36,739 --> 00:56:39,619
where's your

1349
00:56:37,280 --> 00:56:42,340
capacitor but the benefit is it's got a

1350
00:56:39,619 --> 00:56:44,389
axial flux motor so he's the same deal

1351
00:56:42,340 --> 00:56:45,980
yeah and what do you think we have to

1352
00:56:44,389 --> 00:56:48,079
have as far as infrastructure goes

1353
00:56:45,980 --> 00:56:50,090
before we have a successful electric car

1354
00:56:48,079 --> 00:56:52,099

market in Australia we need obviously

1355

00:56:50,090 --> 00:56:53,420

more charging stations so that's the way

1356

00:56:52,099 --> 00:56:56,360

the future there should be more of those

1357

00:56:53,420 --> 00:56:58,070

around in quicker charging so if that

1358

00:56:56,360 --> 00:56:59,570

the charging stations can actually

1359

00:56:58,070 --> 00:57:01,700

produce a lot of power than they could

1360

00:56:59,570 --> 00:57:03,559

actually charge a vehicle within half an

1361

00:57:01,699 --> 00:57:05,359

hour so what about inductive charging

1362

00:57:03,559 --> 00:57:06,920

where if you drive up to your parking

1363

00:57:05,360 --> 00:57:08,570

spot at work or in a car station it

1364

00:57:06,920 --> 00:57:10,519

actually charges while you're on the mat

1365

00:57:08,570 --> 00:57:12,410

there is that anywhere near happening in

1366

00:57:10,519 --> 00:57:14,300

Australia I've never seen it happening

1367

00:57:12,409 --> 00:57:16,039

but yeah it sounds a wee bit idea okay

1368

00:57:14,300 --> 00:57:17,660

well I think what a good idea is to get

1369
00:57:16,039 --> 00:57:18,980
into the passenger seat of this car and

1370
00:57:17,659 --> 00:57:23,089
you take me for a bit of a drive and

1371
00:57:18,980 --> 00:57:27,050
let's just see how we go no I'm hopping

1372
00:57:23,090 --> 00:57:29,480
into the DeLorean now now unfortunately

1373
00:57:27,050 --> 00:57:31,070
no sort of carbon dioxide type gas came

1374
00:57:29,480 --> 00:57:33,530
out the bottom open the door open so

1375
00:57:31,070 --> 00:57:36,080
frankly I'm a bit disappointed there we

1376
00:57:33,530 --> 00:57:37,130
go now of course it's the first time

1377
00:57:36,079 --> 00:57:39,199
this is the first time I've ever

1378
00:57:37,130 --> 00:57:41,150
encountered a gold or is it with the

1379
00:57:39,199 --> 00:57:44,509
only the Gullwing door okay so you shut

1380
00:57:41,150 --> 00:57:46,610
it like this there we go right and I

1381
00:57:44,510 --> 00:57:48,220
tell you it's it's a nice solid pump I

1382
00:57:46,610 --> 00:57:52,190
better put the sleepin alone because

1383
00:57:48,219 --> 00:57:55,309
having seen electric cars go and

1384
00:57:52,190 --> 00:57:56,690
actually hear that everybody that's

1385
00:57:55,309 --> 00:57:59,139
right you can't hear anything because

1386
00:57:56,690 --> 00:58:02,679
it's an electric car

1387
00:57:59,139 --> 00:58:04,599
I think this might be my first time in

1388
00:58:02,679 --> 00:58:09,279
electric car little now mind you one

1389
00:58:04,599 --> 00:58:12,099
thing I must say the roof is about two

1390
00:58:09,280 --> 00:58:14,230
inches above my head I got to say

1391
00:58:12,099 --> 00:58:16,569
despite the roof being so low it's

1392
00:58:14,230 --> 00:58:19,570
contoured so it fits in there that's

1393
00:58:16,570 --> 00:58:21,220
right it's basically Joel Holy Mother of

1394
00:58:19,570 --> 00:58:23,620
pants it's got a bit of an acceleration

1395
00:58:21,219 --> 00:58:25,000
there Brett yes yeah John DeLorean was

1396
00:58:23,619 --> 00:58:27,250
quite tall himself so he had these

1397

00:58:25,000 --> 00:58:30,130
cutouts put in a roof to support tall

1398
00:58:27,250 --> 00:58:32,829
people are now you have a little bit of

1399
00:58:30,130 --> 00:58:35,680
a you've got a you've got a tablet

1400
00:58:32,829 --> 00:58:38,319
computer there reading out all the items

1401
00:58:35,679 --> 00:58:40,440
for you there and what carrots being

1402
00:58:38,320 --> 00:58:43,420
drawn from the motifs is 200 300 Debs

1403
00:58:40,440 --> 00:58:45,579
Wow yes you can idea what's happening so

1404
00:58:43,420 --> 00:58:47,920
I tells you here with capacities left in

1405
00:58:45,579 --> 00:58:50,139
the batteries so you know how much range

1406
00:58:47,920 --> 00:58:53,470
you've got went so it felt like to get

1407
00:58:50,139 --> 00:58:55,509
from pretty much zero to 260 k there

1408
00:58:53,469 --> 00:58:59,980
took about two seconds yeah its pulse

1409
00:58:55,510 --> 00:59:01,840
quite hard what I really have it now so

1410
00:58:59,980 --> 00:59:05,050
if we go fast enough will we go back to

1411
00:59:01,840 --> 00:59:09,450

the 50s with a bit of luck I'd like to

1412

00:59:05,050 --> 00:59:09,450
go to 1987 that's a top year

1413

00:59:09,530 --> 00:59:14,430
yeah we are cruising along now I assure

1414

00:59:12,510 --> 00:59:15,600
you everyone at exactly the speed limit

1415

00:59:14,429 --> 00:59:19,799
we are not exceeding the speed limit

1416

00:59:15,599 --> 00:59:23,009
whatsoever and it's great remember the

1417

00:59:19,800 --> 00:59:24,870
time of my life yeah I took the looks on

1418

00:59:23,010 --> 00:59:26,910
people's faces as you go past them and a

1419

00:59:24,869 --> 00:59:29,359
bit like Idaho it a helmet all right

1420

00:59:26,909 --> 00:59:31,559
look at no that's not Michael J Fox

1421

00:59:29,360 --> 00:59:33,240
that's even funny if I have my daughter

1422

00:59:31,559 --> 00:59:35,639
in the car because it's left hand drive

1423

00:59:33,239 --> 00:59:40,259
everyone thinks that she's driving but

1424

00:59:35,639 --> 00:59:42,809
she wouldn't mind that at all no oh yes

1425

00:59:40,260 --> 00:59:44,670
so look we're back at the workshop now

1426
00:59:42,809 --> 00:59:47,460
driving bus my car which makes me feel

1427
00:59:44,670 --> 00:59:48,750
pretty sad just ok well now ok now the

1428
00:59:47,460 --> 00:59:50,250
challenge of opening the Gullwing door

1429
00:59:48,750 --> 00:59:52,889
what I do a this here is this at yep

1430
00:59:50,250 --> 00:59:55,199
pull that pull that an up it goes again

1431
00:59:52,889 --> 00:59:57,329
no carbon dioxide gas coming down at the

1432
00:59:55,199 --> 00:59:59,159
bottom of it unfortunately and you got

1433
00:59:57,329 --> 01:00:02,029
to mind your head as you can get out but

1434
00:59:59,159 --> 01:00:02,029
it's a winner

1435
01:00:19,659 --> 01:00:25,849
I'm courses hello an ally Dawson to her

1436
01:00:23,030 --> 01:00:27,440
at the skeptics on podcasts were stood

1437
01:00:25,849 --> 01:00:29,539
here this is alvin Dutch Manannan

1438
01:00:27,440 --> 01:00:32,030
skeptic of abundant gift for vital

1439
01:00:29,539 --> 01:00:36,920
information newborns on the skeptic a

1440
01:00:32,030 --> 01:00:40,040
magazine bisous v.v.v point in kv OOP a

1441
01:00:36,920 --> 01:00:44,389
punk talk each vida holla vay vay vay

1442
01:00:40,039 --> 01:00:48,730
pumped TV rupee Potok on tons of it say

1443
01:00:44,389 --> 01:00:48,730
on facebook twitter and google+ Simon

1444
01:01:02,030 --> 01:01:06,150
well thank you for listening to the

1445
01:01:04,170 --> 01:01:08,519
skeptical zone this week and I'm here at

1446
01:01:06,150 --> 01:01:10,619
the breakfast table still enjoying the

1447
01:01:08,519 --> 01:01:12,329
odd pancake Oh to Eden Smith thank you

1448
01:01:10,619 --> 01:01:14,519
for making those lovely pancakes you're

1449
01:01:12,329 --> 01:01:17,130
very welcome rich at any time they were

1450
01:01:14,519 --> 01:01:18,690
delicious with honey our local honey and

1451
01:01:17,130 --> 01:01:21,390
I can even hear the bees buzz note to

1452
01:01:18,690 --> 01:01:23,220
fly i'm here at the breakfast table with

1453
01:01:21,389 --> 01:01:24,839
all my skeptical friends we're here for

1454

01:01:23,219 --> 01:01:27,509
the mighty mid a muster the water

1455
01:01:24,840 --> 01:01:30,559
divining test a full report about the

1456
01:01:27,510 --> 01:01:32,760
water divining test on next week's show

1457
01:01:30,559 --> 01:01:34,590
lori do you think we'll be giving away

1458
01:01:32,760 --> 01:01:36,870
the hundred and ten thousand dollar

1459
01:01:34,590 --> 01:01:39,000
prize to a water diviner well Richard is

1460
01:01:36,869 --> 01:01:40,829
any good skeptic would say well wait

1461
01:01:39,000 --> 01:01:43,139
until we gathered the evidence I have no

1462
01:01:40,829 --> 01:01:47,190
opinion until we get the data in what a

1463
01:01:43,139 --> 01:01:48,809
good skeptic and so from the wonderful

1464
01:01:47,190 --> 01:01:50,610
countryside at midwinter andale next

1465
01:01:48,809 --> 01:02:00,539
week this is Richard Saunders signing

1466
01:01:50,610 --> 01:02:05,519
off you've been listening to the skeptic

1467
01:02:00,539 --> 01:02:09,300
zone visit our website at www.skeptics

1468
01:02:05,519 --> 01:02:12,230

on TV the comments contacts and extra

1469

01:02:09,300 --> 01:02:12,230

video reports