

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

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

3
00:00:22,559 --> 00:00:29,799
hello and welcome to the skeptic zone

4
00:00:25,239 --> 00:00:32,979
episode number 374 the 22nd of November

5
00:00:29,800 --> 00:00:36,759
2015 Richard Saunders here with you from

6
00:00:32,979 --> 00:00:40,869
Sydney Australia a nice overcast cool

7
00:00:36,759 --> 00:00:42,729
mild Sydney Australia over the last few

8
00:00:40,869 --> 00:00:46,599
days there's been a heatwave so this is

9
00:00:42,729 --> 00:00:48,039
a nice reprieve a nice rest coming up on

10
00:00:46,600 --> 00:00:49,329
this week's show we're going to kick off

11
00:00:48,039 --> 00:00:51,128
with an interview with honour my

12
00:00:49,329 --> 00:00:53,199
favorite skeptics from around the world

13
00:00:51,128 --> 00:00:56,619
Michael Marshall from the good thinking

14
00:00:53,200 --> 00:01:00,370
society in the UK Marsh as he's known

15
00:00:56,619 --> 00:01:02,500
now Marsh appeared recently on the BBC

16
00:01:00,369 --> 00:01:05,099
on their morning programme watched by

17
00:01:02,500 --> 00:01:09,340
millions of people to put yet another

18
00:01:05,099 --> 00:01:12,819
nail in the coffin of that wacky crazy

19
00:01:09,340 --> 00:01:17,140
bizarre ridiculous where's my thesaurus

20
00:01:12,819 --> 00:01:19,589
mmm modality of homeopathy Marsh is

21
00:01:17,140 --> 00:01:22,439
going to tell us about that and the

22
00:01:19,590 --> 00:01:25,478
government blacklist when it comes to a

23
00:01:22,439 --> 00:01:27,640
medication in the UK what's going on

24
00:01:25,478 --> 00:01:29,859
there Michael Marshall from the good

25
00:01:27,640 --> 00:01:32,109
thinking society to kick off this week's

26
00:01:29,859 --> 00:01:34,409
episode of the skeptic zone following

27
00:01:32,109 --> 00:01:36,939
that it's evidence please with Joe

28
00:01:34,409 --> 00:01:41,618
alabasta Joe is going to be looking at

29

00:01:36,939 --> 00:01:43,689
the recent story of a mother so so moved

30
00:01:41,618 --> 00:01:45,759
and concerned by the plight of her child

31
00:01:43,689 --> 00:01:47,769
with whooping cough she actually put up

32
00:01:45,759 --> 00:01:51,459
a video online of her child with

33
00:01:47,769 --> 00:01:55,390
whooping cough to warn other parents of

34
00:01:51,459 --> 00:01:57,340
how awful this disease is she got a

35
00:01:55,390 --> 00:01:59,739
strong reaction lots of positive

36
00:01:57,340 --> 00:02:01,978
feedback of course other parents saying

37
00:01:59,739 --> 00:02:06,009
well done and this is an important thing

38
00:02:01,978 --> 00:02:08,618
but my goodness me the reaction she got

39
00:02:06,009 --> 00:02:10,959
from those anti-vaccination lunatics out

40
00:02:08,618 --> 00:02:15,120
there those people who are very keen to

41
00:02:10,959 --> 00:02:17,860
undermine our scientific advancements

42
00:02:15,120 --> 00:02:20,289
what's that expression the road to hell

43
00:02:17,860 --> 00:02:21,940

is paved with good intentions most of

44

00:02:20,289 --> 00:02:23,079

them really think they're doing the

45

00:02:21,939 --> 00:02:26,079

right thing they think they're on a

46

00:02:23,080 --> 00:02:28,780

crusade they think they're saving us all

47

00:02:26,080 --> 00:02:30,350

from the evil conspiracy of one world

48

00:02:28,780 --> 00:02:34,759

government or

49

00:02:30,349 --> 00:02:37,639

the big farmer monopolies or whatever it

50

00:02:34,759 --> 00:02:39,919

is I hope they think they're doing the

51

00:02:37,639 --> 00:02:42,739

right thing but of course this poor

52

00:02:39,919 --> 00:02:46,250

mother has been on the bad end of awful

53

00:02:42,740 --> 00:02:47,930

comments awful feedback we're going to

54

00:02:46,250 --> 00:02:49,840

hear a report from Joe all about this

55

00:02:47,930 --> 00:02:52,219

we're going to hear the video to this

56

00:02:49,840 --> 00:02:55,250

this poor little baby who has whooping

57

00:02:52,219 --> 00:02:58,009

cough and then we'll play a little clip

58
00:02:55,250 --> 00:03:00,620
from recent ABC television program the

59
00:02:58,009 --> 00:03:02,810
drum where they're discussing this this

60
00:03:00,620 --> 00:03:04,640
topic following that it's a weakened

61
00:03:02,810 --> 00:03:08,629
science from the Royal Institution of

62
00:03:04,639 --> 00:03:10,519
Australia w WR I a you sob you an

63
00:03:08,629 --> 00:03:12,859
institution that certainly defends

64
00:03:10,520 --> 00:03:15,530
science and reason then to round off the

65
00:03:12,860 --> 00:03:16,970
show it's Maynard spooky action yet

66
00:03:15,530 --> 00:03:19,069
another interview from the recent

67
00:03:16,969 --> 00:03:21,169
Australian skeptics national convention

68
00:03:19,069 --> 00:03:24,650
this week Maynard's going to be speaking

69
00:03:21,169 --> 00:03:27,169
to a former skeptic zone reporter a vice

70
00:03:24,650 --> 00:03:30,620
president of Australian skeptics Joanne

71
00:03:27,169 --> 00:03:33,259
been amoo Chow and Benham ooh she's a

72
00:03:30,620 --> 00:03:36,259
clinical nurse consultant but she also

73
00:03:33,259 --> 00:03:39,799
coordinates clinical trials in radiation

74
00:03:36,259 --> 00:03:43,389
oncology wow that's a mouthful she's

75
00:03:39,800 --> 00:03:45,860
going to be discussing prostate cancer

76
00:03:43,389 --> 00:03:47,869
what an interesting interview it is I

77
00:03:45,860 --> 00:03:52,850
encourage you all to listen especially

78
00:03:47,870 --> 00:03:54,860
if your man around my age an interesting

79
00:03:52,849 --> 00:03:56,870
interview at jo-ann been amoo a defender

80
00:03:54,860 --> 00:04:00,110
of science of course a big happy

81
00:03:56,870 --> 00:04:02,110
birthday to dr. Reggie dr. Rachel Dunlop

82
00:04:00,110 --> 00:04:05,240
known to millions of dr. HC of course

83
00:04:02,110 --> 00:04:07,370
who just celebrated her birthday well

84
00:04:05,240 --> 00:04:12,040
done Reggie and now it's time for me to

85
00:04:07,370 --> 00:04:15,590
run downstairs and have some of the devo

86

00:04:12,039 --> 00:04:19,279
delicious indescribable peanut butter

87
00:04:15,590 --> 00:04:21,199
slice Jo alabaster and her family made

88
00:04:19,279 --> 00:04:24,949
for me we had a little celebration on

89
00:04:21,199 --> 00:04:27,500
door get together just today I got a big

90
00:04:24,949 --> 00:04:29,589
birthday coming up in there in the very

91
00:04:27,500 --> 00:04:32,750
near future and it was a little quiet

92
00:04:29,589 --> 00:04:35,810
chance to celebrate that and my goodness

93
00:04:32,750 --> 00:04:38,949
me Joe alabaster's peanut butter slicer

94
00:04:35,810 --> 00:04:41,110
oh boy I'm still recovering mmm-hmm

95
00:04:38,949 --> 00:04:43,870
but there's still room for a one slice

96
00:04:41,110 --> 00:04:47,069
mall i'm doing that and i hope you enjoy

97
00:04:43,870 --> 00:04:47,069
the skeptics

98
00:05:05,139 --> 00:05:11,000
and joining me now on the line from

99
00:05:07,850 --> 00:05:12,950
Liverpool as he does every so often not

100
00:05:11,000 --> 00:05:14,750

often enough of course it's Michael

101

00:05:12,949 --> 00:05:17,029

Marshall from the good thinking society

102

00:05:14,750 --> 00:05:18,310

hello Michael hello Richard nice to

103

00:05:17,029 --> 00:05:21,889

speaking to you again always a pleasure

104

00:05:18,310 --> 00:05:23,540

thank you and as our Sydney listeners

105

00:05:21,889 --> 00:05:25,490

might know there's been a heatwave

106

00:05:23,540 --> 00:05:26,870

recently in Sydney and right now we're

107

00:05:25,490 --> 00:05:28,430

on the tail end of it so I don't care

108

00:05:26,870 --> 00:05:31,060

what sort of whether you're having a

109

00:05:28,430 --> 00:05:33,079

Liverpool I would swap with you gladly

110

00:05:31,060 --> 00:05:34,639

well I don't think we'll ever have the

111

00:05:33,079 --> 00:05:36,709

kind of heat that you guys have in

112

00:05:34,639 --> 00:05:38,060

Australia it's it's the warmest November

113

00:05:36,709 --> 00:05:40,279

ever I think here in Liverpool it's

114

00:05:38,060 --> 00:05:41,629

sunny outside which is a nice but it's

115
00:05:40,279 --> 00:05:44,239
also disconcerting about the long-term

116
00:05:41,629 --> 00:05:45,500
future of the planet but yeah it's not

117
00:05:44,240 --> 00:05:48,560
quite the heat that you guys are having

118
00:05:45,500 --> 00:05:50,600
air well let's put the weather aside for

119
00:05:48,560 --> 00:05:52,670
the moment marsh and let's talk about

120
00:05:50,600 --> 00:05:55,430
more interesting in probably more

121
00:05:52,670 --> 00:05:57,439
important things now news is filtered

122
00:05:55,430 --> 00:05:59,209
through to us here in Australia about

123
00:05:57,439 --> 00:06:01,879
something called a black list which I'll

124
00:05:59,209 --> 00:06:03,589
ask you to expand upon in a minute but

125
00:06:01,879 --> 00:06:06,649
also you've been out and about you've

126
00:06:03,589 --> 00:06:08,209
been appearing on national TV can you

127
00:06:06,649 --> 00:06:10,429
put all that together for our listeners

128
00:06:08,209 --> 00:06:11,719
yeah absolutely so this is this isn't as

129
00:06:10,430 --> 00:06:13,040
quite exciting for a sweetie this is

130
00:06:11,720 --> 00:06:14,480
well one of the projects we've been

131
00:06:13,040 --> 00:06:16,640
working on with good thinking fur I

132
00:06:14,480 --> 00:06:17,930
think it's been about a year I think one

133
00:06:16,639 --> 00:06:19,370
of the previous times I was on the show

134
00:06:17,930 --> 00:06:20,629
I think I mentioned that one of the

135
00:06:19,370 --> 00:06:22,819
things we were really looking at we had

136
00:06:20,629 --> 00:06:24,800
a legal team and we were poring over all

137
00:06:22,819 --> 00:06:26,569
the different ways that we could could

138
00:06:24,800 --> 00:06:28,100
bring legal challenges against the NHS

139
00:06:26,569 --> 00:06:29,930
provision of homeopathy so spending

140
00:06:28,100 --> 00:06:31,340
actually government money on our health

141
00:06:29,930 --> 00:06:34,250
service on something we know it doesn't

142
00:06:31,339 --> 00:06:35,599
work and in 2010 the NHS even said we

143

00:06:34,250 --> 00:06:37,490
know this doesn't work they've still

144
00:06:35,600 --> 00:06:39,560
been spending 5 million pounds a year on

145
00:06:37,490 --> 00:06:40,730
it so it's we feel that a bit out of

146
00:06:39,560 --> 00:06:41,870
order and we were just looking at lots

147
00:06:40,730 --> 00:06:43,400
of different routes that we could try

148
00:06:41,870 --> 00:06:44,959
and challenge this and what are the ones

149
00:06:43,399 --> 00:06:46,339
we came across is actually just this one

150
00:06:44,959 --> 00:06:47,810
has hit the news it's it's a very

151
00:06:46,339 --> 00:06:51,229
technical one but it could be really

152
00:06:47,810 --> 00:06:53,418
significant so the NHS has a list called

153
00:06:51,230 --> 00:06:55,250
a blacklist schedule one of the drugs

154
00:06:53,418 --> 00:06:57,409
regulations and on this list you put

155
00:06:55,250 --> 00:06:59,870
anything that you don't want a GP to

156
00:06:57,410 --> 00:07:01,729
prescribe so it might be this drug over

157
00:06:59,870 --> 00:07:03,978

here by a pharmaceutical that's been

158

00:07:01,728 --> 00:07:06,300

proven not to be effective at all or it

159

00:07:03,978 --> 00:07:07,769

might be a drug that is expend

160

00:07:06,300 --> 00:07:09,360

but there is a cheaper one available

161

00:07:07,769 --> 00:07:11,279

elsewhere that's better you know it's

162

00:07:09,360 --> 00:07:12,750

when it goes off patent you don't pay if

163

00:07:11,279 --> 00:07:14,038

the expensive drug just use the cheap

164

00:07:12,750 --> 00:07:15,839

drug and save a lot of money so maybe

165

00:07:14,038 --> 00:07:17,370

you put the expensive one on this black

166

00:07:15,839 --> 00:07:18,359

list and there's things like that and

167

00:07:17,370 --> 00:07:21,120

there's things like if you can buy it

168

00:07:18,360 --> 00:07:22,439

very easily in supermarkets or

169

00:07:21,120 --> 00:07:24,300

pharmacies and it's not going hard to

170

00:07:22,439 --> 00:07:25,500

find this very cheap then if you go on

171

00:07:24,300 --> 00:07:28,259

the black list so you can't get

172
00:07:25,500 --> 00:07:30,538
ibuprofen or paracetamol or something

173
00:07:28,259 --> 00:07:32,699
like that on the NHS because why bother

174
00:07:30,538 --> 00:07:34,199
getting the whole health service to go

175
00:07:32,699 --> 00:07:35,908
through the bureaucracy and the admin of

176
00:07:34,199 --> 00:07:38,370
getting getting you a prescription which

177
00:07:35,908 --> 00:07:39,629
you pay a pound for which for something

178
00:07:38,370 --> 00:07:41,310
that you can go into a supermarket and

179
00:07:39,629 --> 00:07:43,590
buy for 20 pence you know so there's

180
00:07:41,310 --> 00:07:44,939
lots of different reasons and this list

181
00:07:43,589 --> 00:07:46,288
got three thousand different things on

182
00:07:44,939 --> 00:07:47,519
it some of the things are like say they

183
00:07:46,288 --> 00:07:49,408
actually work whether it's not worth

184
00:07:47,519 --> 00:07:51,029
they're not cost effective so we have a

185
00:07:49,408 --> 00:07:53,550
look at the reasons why stuff gets added

186

00:07:51,029 --> 00:07:55,049
to this list and won't you know if it

187

00:07:53,550 --> 00:07:57,300
doesn't work it should go on the list

188

00:07:55,050 --> 00:07:59,550
well we know homeopathy doesn't work the

189

00:07:57,300 --> 00:08:02,098
government stated this for five years so

190

00:07:59,550 --> 00:08:03,270
surely it only takes one reason to go on

191

00:08:02,098 --> 00:08:05,490
the list so that should be reason enough

192

00:08:03,269 --> 00:08:07,139
but we've got the next reason now is it

193

00:08:05,490 --> 00:08:09,418
is there something available that's

194

00:08:07,139 --> 00:08:10,889
better but cheaper well everything is

195

00:08:09,418 --> 00:08:13,978
better than it because it doesn't work

196

00:08:10,889 --> 00:08:16,110
so it takes that box you know they were

197

00:08:13,978 --> 00:08:18,120
saying it even if people really wanted

198

00:08:16,110 --> 00:08:20,310
their homeopathy if it was problem this

199

00:08:18,120 --> 00:08:22,259
list and GPS couldn't prescribe it would

200

00:08:20,310 --> 00:08:24,180
this stop anybody getting as anybody's

201
00:08:22,259 --> 00:08:26,009
access to homeopathy well no because you

202
00:08:24,180 --> 00:08:27,120
can go into your pharmacies you can go

203
00:08:26,009 --> 00:08:28,288
into your boots and your whole new

204
00:08:27,120 --> 00:08:31,468
Barrett and your health stores and

205
00:08:28,288 --> 00:08:32,578
homeopathy costs about a fiver well if

206
00:08:31,468 --> 00:08:33,958
you're on the NHS you could get a

207
00:08:32,578 --> 00:08:35,819
prescription it costs about seven or

208
00:08:33,958 --> 00:08:37,528
eight pounds so it's actually cheaper do

209
00:08:35,820 --> 00:08:39,000
not get it on prescription so we kind of

210
00:08:37,528 --> 00:08:40,679
made this case the government and said

211
00:08:39,000 --> 00:08:41,940
you've got this black list you've got it

212
00:08:40,679 --> 00:08:44,009
because you've got it you've got a duty

213
00:08:41,940 --> 00:08:46,050
under the European laws to maintain this

214
00:08:44,009 --> 00:08:47,970

list we think homeopathy has to be on it

215

00:08:46,049 --> 00:08:50,309

and this is the arguably been making to

216

00:08:47,970 --> 00:08:51,959

them for since the start of 2015 and

217

00:08:50,309 --> 00:08:53,489

initially they said well we're not going

218

00:08:51,958 --> 00:08:54,750

to add anything to the list we've got no

219

00:08:53,490 --> 00:08:56,579

plans to change the list we haven't

220

00:08:54,750 --> 00:08:58,500

changed it for a long time we're just

221

00:08:56,578 --> 00:09:00,929

not going to look at it and we said yeah

222

00:08:58,500 --> 00:09:02,789

but legally you have to and you can't

223

00:09:00,929 --> 00:09:04,769

just decide arbitrarily the random point

224

00:09:02,789 --> 00:09:06,659

to stop doing your job on this list

225

00:09:04,769 --> 00:09:07,649

because if you imagine that you make one

226

00:09:06,659 --> 00:09:09,149

of the products that's on the list

227

00:09:07,649 --> 00:09:10,559

you're gonna be pretty annoyed that

228

00:09:09,149 --> 00:09:12,360

you're on the list and this other

229
00:09:10,559 --> 00:09:13,819
product that's newer isn't on the list

230
00:09:12,360 --> 00:09:15,959
so it's going to be sort of like

231
00:09:13,820 --> 00:09:17,790
discriminating against your worthless

232
00:09:15,958 --> 00:09:19,259
product in the win and we may at this

233
00:09:17,789 --> 00:09:20,069
point in them said I mean if that's your

234
00:09:19,259 --> 00:09:21,720
policy then

235
00:09:20,070 --> 00:09:23,820
you might find that everyone on that

236
00:09:21,720 --> 00:09:25,290
list has a right to get in touch with a

237
00:09:23,820 --> 00:09:28,080
fairly angry letter from their lawyers

238
00:09:25,289 --> 00:09:29,939
and to make this point back and the

239
00:09:28,080 --> 00:09:31,590
great news is that a couple of weeks ago

240
00:09:29,940 --> 00:09:35,100
we have finally from the department

241
00:09:31,590 --> 00:09:36,300
health and they're in early 2016 they're

242
00:09:35,100 --> 00:09:38,430
gonna they're appointed they've

243
00:09:36,299 --> 00:09:40,169
appointed a minister to look at a proper

244
00:09:38,429 --> 00:09:41,939
consultation on whether homeopathy

245
00:09:40,169 --> 00:09:44,639
should go on this list we're going to

246
00:09:41,940 --> 00:09:46,440
part that consultation the people we

247
00:09:44,639 --> 00:09:48,419
know who are experts in the field people

248
00:09:46,440 --> 00:09:49,590
at Ed's ardern stand the UK's chief

249
00:09:48,419 --> 00:09:51,419
medical officer those are the people

250
00:09:49,590 --> 00:09:53,070
that will be looking to get involved and

251
00:09:51,419 --> 00:09:54,449
share their expert opinion on this and I

252
00:09:53,070 --> 00:09:56,879
think we've got a really good shot at

253
00:09:54,450 --> 00:09:59,400
getting homeopathy banned in GP

254
00:09:56,879 --> 00:10:00,840
surgeries and as I say it's not going to

255
00:09:59,399 --> 00:10:02,730
stop your average consumer if they

256
00:10:00,840 --> 00:10:04,170
really feel they need their sugar pills

257

00:10:02,730 --> 00:10:06,509
aren't going to do anything they can

258
00:10:04,169 --> 00:10:08,819
walk into a pharmacy they can walk into

259
00:10:06,509 --> 00:10:10,019
a supermarket they can look online and

260
00:10:08,820 --> 00:10:11,580
get there for me off of thee but it's

261
00:10:10,019 --> 00:10:13,620
it's the fact that it's going to stop it

262
00:10:11,580 --> 00:10:16,320
being prescribed on the NHS and that is

263
00:10:13,620 --> 00:10:17,879
a huge huge symbolic victory as well as

264
00:10:16,320 --> 00:10:19,110
a real victory it'll save a couple

265
00:10:17,879 --> 00:10:21,090
hundred thousand pounds ago but the

266
00:10:19,110 --> 00:10:22,610
symbolism of it is so important that

267
00:10:21,090 --> 00:10:25,019
we're no longer endorsing this

268
00:10:22,610 --> 00:10:27,930
absolutely it would send a powerful

269
00:10:25,019 --> 00:10:30,919
message around the world and I can I can

270
00:10:27,929 --> 00:10:34,019
almost hear the homeopaths screeching

271
00:10:30,919 --> 00:10:35,610

yeah well if you if you look at any of

272

00:10:34,019 --> 00:10:37,379

the comments on any of the news coverage

273

00:10:35,610 --> 00:10:39,330

you live you have definitely heard or

274

00:10:37,379 --> 00:10:41,189

the homeopath sir with a few things to

275

00:10:39,330 --> 00:10:43,379

say it because you say I was on TV about

276

00:10:41,190 --> 00:10:46,080

this on breakfast news debating with her

277

00:10:43,379 --> 00:10:47,549

with a homeopath are there and Simon was

278

00:10:46,080 --> 00:10:50,100

on Simon seeing head of the good

279

00:10:47,549 --> 00:10:52,049

thinking society he was on the TV and

280

00:10:50,100 --> 00:10:53,909

the radio and lots of different radio

281

00:10:52,049 --> 00:10:55,679

and we made it into every national

282

00:10:53,909 --> 00:10:57,179

newspaper as well so he was it was

283

00:10:55,679 --> 00:10:58,709

really big news when you couldn't have

284

00:10:57,179 --> 00:11:00,149

missed it really if you were sort of

285

00:10:58,710 --> 00:11:01,710

paying attention to the news at all that

286
00:11:00,149 --> 00:11:03,779
day and the great thing about that is

287
00:11:01,710 --> 00:11:05,780
it's because everywhere give us that

288
00:11:03,779 --> 00:11:07,589
coverage because everywhere give us very

289
00:11:05,779 --> 00:11:09,509
positive coverage about what we were

290
00:11:07,590 --> 00:11:11,040
trying to do it puts pressure on the

291
00:11:09,509 --> 00:11:13,710
government to do this right they can't

292
00:11:11,039 --> 00:11:15,419
just bow down to any lobbying from

293
00:11:13,710 --> 00:11:16,830
homeopaths without following the letter

294
00:11:15,419 --> 00:11:18,209
of the law and we think we've got a good

295
00:11:16,830 --> 00:11:20,190
handle on the law on this one so we

296
00:11:18,210 --> 00:11:22,440
think is a real chance and this will

297
00:11:20,190 --> 00:11:25,140
it'll stop gp's prescribing it which is

298
00:11:22,440 --> 00:11:27,120
one element of the funding the other way

299
00:11:25,139 --> 00:11:28,259
that the homeopathic gets funded it on

300
00:11:27,120 --> 00:11:30,299
the NHS in this country is through

301
00:11:28,259 --> 00:11:32,730
homeopathic hospitals which we still

302
00:11:30,299 --> 00:11:33,870
have one or two of we have five they

303
00:11:32,730 --> 00:11:36,330
start they're closed down

304
00:11:33,870 --> 00:11:38,250
so in all of the five million pounds

305
00:11:36,330 --> 00:11:40,650
that we spend on homeopathy in the UK it

306
00:11:38,250 --> 00:11:42,720
covers about 110,000 pounds which isn't

307
00:11:40,649 --> 00:11:45,059
a huge amount but at the same time our

308
00:11:42,720 --> 00:11:47,040
other work is knocking on the doors of

309
00:11:45,059 --> 00:11:48,629
those hospitals and challenging the

310
00:11:47,039 --> 00:11:50,189
funding there so what we do it is with

311
00:11:48,629 --> 00:11:52,110
challenging every little bit of this and

312
00:11:50,190 --> 00:11:54,450
this just shows it's another step on the

313
00:11:52,110 --> 00:11:56,339
on the way towards the NHS becoming

314

00:11:54,450 --> 00:11:58,528
homeopathy free and actually being able

315
00:11:56,339 --> 00:11:59,850
to solve yeah but its head up into their

316
00:11:58,528 --> 00:12:02,939
priority and say we're no longer

317
00:11:59,850 --> 00:12:05,009
attached to this complete quackery it's

318
00:12:02,940 --> 00:12:06,660
going to happen I mean it is one thing

319
00:12:05,009 --> 00:12:10,139
I've learned over the years of being in

320
00:12:06,659 --> 00:12:12,449
the skeptical game is um things happen

321
00:12:10,139 --> 00:12:14,850
at their own pace and sometimes it can

322
00:12:12,450 --> 00:12:17,820
be very slow and can be bewildering I

323
00:12:14,850 --> 00:12:20,670
mean if we take homeopathy as an example

324
00:12:17,820 --> 00:12:22,680
it so clearly doesn't work and it

325
00:12:20,669 --> 00:12:25,528
clearly cannot work if the laws of

326
00:12:22,679 --> 00:12:28,349
physics hold true you think that it

327
00:12:25,528 --> 00:12:31,259
would be a quick death but it's quite

328
00:12:28,350 --> 00:12:33,350

staggering how it it hangs on and there

329

00:12:31,259 --> 00:12:37,110
seems to be some sort of lethargy

330

00:12:33,350 --> 00:12:39,750
officialdom to put the nail in the

331

00:12:37,110 --> 00:12:41,459
coffin yeah I think that's right and in

332

00:12:39,750 --> 00:12:43,409
a way I can sort of see why I mean the

333

00:12:41,458 --> 00:12:44,909
majority of the public don't really know

334

00:12:43,409 --> 00:12:46,620
what homeopathy is most of the time

335

00:12:44,909 --> 00:12:48,000
occasion it will sort of come into view

336

00:12:46,620 --> 00:12:50,129
when there's a big story in the papers

337

00:12:48,000 --> 00:12:51,750
or you know when a lot of random

338

00:12:50,129 --> 00:12:53,370
skeptics decide to take homeopathic

339

00:12:51,750 --> 00:12:54,539
overdoses on the streets and it kind of

340

00:12:53,370 --> 00:12:56,789
pushes the conversation into the

341

00:12:54,539 --> 00:12:58,259
narrative and into the landscape a

342

00:12:56,789 --> 00:13:00,000
little bit but other than that your

343
00:12:58,259 --> 00:13:01,620
average person just thinks well this is

344
00:13:00,000 --> 00:13:04,379
herb or medicine it's a natural medicine

345
00:13:01,620 --> 00:13:06,149
I live I might not try it but maybe it's

346
00:13:04,379 --> 00:13:07,919
maybe other people should have access to

347
00:13:06,149 --> 00:13:09,838
it and maybe that's not a bad thing and

348
00:13:07,919 --> 00:13:10,949
those sound like persuasive argument so

349
00:13:09,839 --> 00:13:13,140
I can imagine that there are politicians

350
00:13:10,950 --> 00:13:15,450
who think if I was to make a stand on

351
00:13:13,139 --> 00:13:16,620
homeopathy how many people's vote to my

352
00:13:15,450 --> 00:13:18,240
wedding and how many people's votes am I

353
00:13:16,620 --> 00:13:21,360
losing and this is the other thing for

354
00:13:18,240 --> 00:13:22,589
us is that when we when we were campaign

355
00:13:21,360 --> 00:13:24,028
about homeopathy when I was just doing

356
00:13:22,589 --> 00:13:25,920
this in my spare time and it is a

357
00:13:24,028 --> 00:13:27,899
volunteer and you know how you if time

358
00:13:25,919 --> 00:13:29,458
can get quite limited we did the 10 23

359
00:13:27,899 --> 00:13:31,319
campaign and we had a little bit of

360
00:13:29,458 --> 00:13:34,319
local success on the NHS getting rid of

361
00:13:31,320 --> 00:13:36,300
it in the world just near Liverpool but

362
00:13:34,320 --> 00:13:38,250
because we weren't we didn't have the

363
00:13:36,299 --> 00:13:40,500
time and the expertise to follow that

364
00:13:38,250 --> 00:13:42,779
conversation we missed when the

365
00:13:40,500 --> 00:13:44,879
homeopaths lobbied for that decision to

366
00:13:42,779 --> 00:13:46,259
be undone and because it was just the

367
00:13:44,879 --> 00:13:47,549
homeopath lobbying and there was no

368
00:13:46,259 --> 00:13:49,289
voice on our side

369
00:13:47,549 --> 00:13:51,059
they were successful and I think this is

370
00:13:49,289 --> 00:13:52,799
a big part of it is that often when

371

00:13:51,059 --> 00:13:54,479
these things these consultations come up

372
00:13:52,799 --> 00:13:56,849
all these decisions are there to

373
00:13:54,480 --> 00:13:58,560
potentially be made skeptics might not

374
00:13:56,850 --> 00:14:00,389
see it or when they do see it we might

375
00:13:58,559 --> 00:14:02,489
kind of go Oh brilliant the NHS is going

376
00:14:00,389 --> 00:14:04,559
to get rid of homeopathy fantastic yeah

377
00:14:02,490 --> 00:14:05,700
but actually what we need to see is the

378
00:14:04,559 --> 00:14:07,289
NHS looks like they're going to get rid

379
00:14:05,700 --> 00:14:08,759
of homeopathy I need to send them a

380
00:14:07,289 --> 00:14:10,169
letter of support because they're going

381
00:14:08,759 --> 00:14:12,539
to get a thousand letters from people

382
00:14:10,169 --> 00:14:14,549
who want to get who wanted to stay so

383
00:14:12,539 --> 00:14:15,990
they need to hear our voice in this in

384
00:14:14,549 --> 00:14:18,000
this conversation and that's why yes

385
00:14:15,990 --> 00:14:19,500

we're trying to be a lobbyist that's why

386

00:14:18,000 --> 00:14:21,720

we're trying to put together a campaign

387

00:14:19,500 --> 00:14:23,399

or a project of good thinking to

388

00:14:21,720 --> 00:14:26,550

represent the skeptical voice and make

389

00:14:23,399 --> 00:14:27,929

sure it's a balanced view point but the

390

00:14:26,549 --> 00:14:29,458

the politicians here they don't just

391

00:14:27,929 --> 00:14:31,109

hear from home your pats and people who

392

00:14:29,458 --> 00:14:33,778

use homeopathy they're also hearing from

393

00:14:31,110 --> 00:14:35,519

rationalist to say that five million

394

00:14:33,778 --> 00:14:37,588

pounds can go to a lot of good causes

395

00:14:35,519 --> 00:14:39,379

can do a lot of good on the NHS if it's

396

00:14:37,589 --> 00:14:42,120

not going on stuff we nor doesn't work

397

00:14:39,379 --> 00:14:44,549

well of course they also have the

398

00:14:42,120 --> 00:14:46,350

situation and the same is true here that

399

00:14:44,549 --> 00:14:49,049

we have to be vigilant because the other

400
00:14:46,350 --> 00:14:51,509
side are eager and keen and they have

401
00:14:49,049 --> 00:14:53,278
many supporters waiting by their

402
00:14:51,509 --> 00:14:55,649
computers to send letters or to take

403
00:14:53,278 --> 00:14:57,539
action of the drop of the hat so that's

404
00:14:55,649 --> 00:15:00,350
of course that's something we have to

405
00:14:57,539 --> 00:15:02,819
bear in mind not only with homeopathy

406
00:15:00,350 --> 00:15:04,470
exactly but especially things like the

407
00:15:02,820 --> 00:15:06,750
anti-vaccination crowd and things like

408
00:15:04,470 --> 00:15:09,300
that but just getting back to this TV

409
00:15:06,750 --> 00:15:10,500
appearance I was pretty impressed much I

410
00:15:09,299 --> 00:15:13,319
thought you did pretty well what was the

411
00:15:10,500 --> 00:15:15,629
name of that show that was BBC Breakfast

412
00:15:13,320 --> 00:15:16,890
I mean that's the flagship TV program

413
00:15:15,629 --> 00:15:18,778
for the BBC in the morning it's watched

414
00:15:16,889 --> 00:15:21,778
by a 6 million people live so it was a

415
00:15:18,778 --> 00:15:23,070
very very bizarre situation I kind of

416
00:15:21,778 --> 00:15:24,838
found out the day before that I was

417
00:15:23,070 --> 00:15:26,879
going in I thought oh god can I really

418
00:15:24,839 --> 00:15:28,800
do this am I gonna bottle this but ya

419
00:15:26,879 --> 00:15:30,509
know it was it was fun it was it was a

420
00:15:28,799 --> 00:15:32,759
bizarre situation but it was an awful

421
00:15:30,509 --> 00:15:37,110
lot of fun yeah it was nice to be able

422
00:15:32,759 --> 00:15:38,850
to put forward our own reasoning because

423
00:15:37,110 --> 00:15:40,889
so many people will try and paint us is

424
00:15:38,850 --> 00:15:42,389
like oh well these are big evil skeptics

425
00:15:40,889 --> 00:15:44,220
and they're probably being paid by Big

426
00:15:42,389 --> 00:15:46,559
Pharma they want to take away you know

427
00:15:44,220 --> 00:15:47,879
they want to take away your choice and

428

00:15:46,559 --> 00:15:50,599
we were able to say essentially that

429
00:15:47,879 --> 00:15:52,889
just at this country i mean the the

430
00:15:50,600 --> 00:15:55,170
British Medical Association the junior

431
00:15:52,889 --> 00:15:56,549
doctors have had their peer cut very

432
00:15:55,169 --> 00:15:57,958
recently and they are about to go on

433
00:15:56,549 --> 00:15:59,278
strike I think next week where there's

434
00:15:57,958 --> 00:16:01,019
going to be the first strike on the NHS

435
00:15:59,278 --> 00:16:03,029
full striking in

436
00:16:01,019 --> 00:16:04,949
got very very many years so I was able

437
00:16:03,029 --> 00:16:06,569
to say take five million pounds away

438
00:16:04,950 --> 00:16:07,680
from homeopathy what can you do with

439
00:16:06,570 --> 00:16:09,180
that money well you could give it to the

440
00:16:07,679 --> 00:16:11,159
junior doctors for 14 people who think

441
00:16:09,179 --> 00:16:12,029
five millions not much tell that to the

442
00:16:11,159 --> 00:16:14,370

people who haven't go on strike because

443

00:16:12,029 --> 00:16:15,600

out an air pear cut yet we're financing

444

00:16:14,370 --> 00:16:17,250

something we know doesn't work so was

445

00:16:15,600 --> 00:16:19,230

able to put those arguments across

446

00:16:17,250 --> 00:16:21,659

result was a was very valuable to get to

447

00:16:19,230 --> 00:16:23,399

get a message out there I think so and

448

00:16:21,659 --> 00:16:25,529

what I'll do focuses I'll linked the

449

00:16:23,399 --> 00:16:28,289

video of michael marshall on that show

450

00:16:25,529 --> 00:16:29,669

in this week's show note so you can just

451

00:16:28,289 --> 00:16:31,409

google the name of the show and Michael

452

00:16:29,669 --> 00:16:33,389

Marshall I'm sure it'll come up in

453

00:16:31,409 --> 00:16:35,779

youtube it was it was quite a good

454

00:16:33,389 --> 00:16:39,360

performance and that the man you were

455

00:16:35,779 --> 00:16:41,519

pitted against was interesting this what

456

00:16:39,360 --> 00:16:43,590

one thing that really took me when I was

457
00:16:41,519 --> 00:16:46,559
watching it is when he was claiming

458
00:16:43,590 --> 00:16:49,290
something what was yes there is minut

459
00:16:46,559 --> 00:16:51,089
something particle all the substances in

460
00:16:49,289 --> 00:16:53,429
the home homeopathic preparations

461
00:16:51,090 --> 00:16:55,560
nothing no there's not does he know what

462
00:16:53,429 --> 00:16:56,969
he's talking about the other question is

463
00:16:55,559 --> 00:16:58,049
about you to do they have nothing in

464
00:16:56,970 --> 00:17:01,200
them actually the majority of

465
00:16:58,049 --> 00:17:03,659
homeopathic medicines on sale in in the

466
00:17:01,200 --> 00:17:05,100
High Street pharmacies do contain small

467
00:17:03,659 --> 00:17:08,459
amounts admittedly but they do contain

468
00:17:05,099 --> 00:17:10,019
the substances on the label yeah well

469
00:17:08,459 --> 00:17:11,279
this is the thing I think and it's it's

470
00:17:10,019 --> 00:17:13,109
hard to know I mean obviously you and a

471
00:17:11,279 --> 00:17:15,569
lot of pressure maybe he made an error

472
00:17:13,109 --> 00:17:17,159
of judgment i'm not quite sure but yeah

473
00:17:15,569 --> 00:17:18,779
I mean he certainly knows he's talking

474
00:17:17,160 --> 00:17:20,250
about because I mean he was labeled as

475
00:17:18,779 --> 00:17:22,709
he is it came up on screen Isaiah can

476
00:17:20,250 --> 00:17:24,240
consultant rheumatologist but the the

477
00:17:22,709 --> 00:17:27,420
job titles they fail to mention was that

478
00:17:24,240 --> 00:17:28,799
he's the clinical director of the London

479
00:17:27,420 --> 00:17:30,870
homeopathic hospital and he's the

480
00:17:28,799 --> 00:17:34,039
homeopath to the Queen as they didn't

481
00:17:30,869 --> 00:17:36,359
mention the his uh his deep-rooted

482
00:17:34,039 --> 00:17:38,549
career in homeopathy when they put his

483
00:17:36,359 --> 00:17:39,869
job title up but yeah so I was pointing

484
00:17:38,549 --> 00:17:41,190
out because if the thing is all the way

485

00:17:39,869 --> 00:17:42,629
through is that the morning as they were

486
00:17:41,190 --> 00:17:43,920
trailing this on TV they were saying

487
00:17:42,630 --> 00:17:45,630
well it's about taking if something

488
00:17:43,920 --> 00:17:47,220
taking a little bit of something that

489
00:17:45,630 --> 00:17:48,750
would cause an illness to get rid of an

490
00:17:47,220 --> 00:17:51,029
illness so it's at it's like taking

491
00:17:48,750 --> 00:17:52,619
pollen to cure her fever so when I went

492
00:17:51,029 --> 00:17:53,549
on the first thing I said was well we

493
00:17:52,619 --> 00:17:55,529
need to know what we're talking about

494
00:17:53,549 --> 00:17:56,970
this is substances I've got nothing at

495
00:17:55,529 --> 00:17:58,980
all in these treatments that just sugar

496
00:17:56,970 --> 00:18:01,019
pills there is no apollon in the hay

497
00:17:58,980 --> 00:18:02,730
fever tablet there's no sulfur in the

498
00:18:01,019 --> 00:18:04,349
sulfur tablets they're just sugar pills

499
00:18:02,730 --> 00:18:06,390

which i think is a very key point to get

500

00:18:04,349 --> 00:18:10,409

across it's a point we have to keep

501

00:18:06,390 --> 00:18:12,210

making and maggie in making because many

502

00:18:10,410 --> 00:18:13,600

people out there in the media to are

503

00:18:12,210 --> 00:18:16,630

under the impression

504

00:18:13,599 --> 00:18:18,519

homeopathy is small doses of something

505

00:18:16,630 --> 00:18:20,650

or other and yes we have to keep

506

00:18:18,519 --> 00:18:23,288

hammering the fact that no it's no dose

507

00:18:20,650 --> 00:18:25,630

it's nothing it's Lloyd yeah and yeah

508

00:18:23,288 --> 00:18:27,609

and I wonder how much of the the

509

00:18:25,630 --> 00:18:30,789

homeopathy lobby groups to hold me off

510

00:18:27,609 --> 00:18:32,918

the industry bodies want to keep that

511

00:18:30,788 --> 00:18:35,319

confusion alive so they want they want

512

00:18:32,919 --> 00:18:36,970

outright lie because that would be very

513

00:18:35,319 --> 00:18:38,769

very unwise if than board there well say

514
00:18:36,970 --> 00:18:40,538
is that while we take my new doses and

515
00:18:38,769 --> 00:18:42,548
we with their very diluted but they

516
00:18:40,538 --> 00:18:44,589
won't say how dilute it they won't tell

517
00:18:42,548 --> 00:18:46,538
you there's nothing in it and this is

518
00:18:44,589 --> 00:18:48,428
the reason that I think that's such a

519
00:18:46,538 --> 00:18:50,200
powerful hard to infer for skeptics

520
00:18:48,429 --> 00:18:51,429
because the moment that you start

521
00:18:50,200 --> 00:18:53,319
pointing out there is nothing in

522
00:18:51,429 --> 00:18:55,059
homeopathy the homie up homie past

523
00:18:53,319 --> 00:18:56,649
they've got one of two choices one is to

524
00:18:55,058 --> 00:18:58,298
say well of course there's nothing in it

525
00:18:56,650 --> 00:19:00,070
it all works on the energies and

526
00:18:58,298 --> 00:19:02,019
vibrations of the water of the memory of

527
00:19:00,069 --> 00:19:04,899
the sugar and everyone goes sorry what

528
00:19:02,019 --> 00:19:07,119
no that sounds like nonsense all they

529
00:19:04,900 --> 00:19:08,590
have to pretend that there's something

530
00:19:07,119 --> 00:19:10,029
in it and this is something that

531
00:19:08,589 --> 00:19:11,980
happened when I was talking to peter

532
00:19:10,029 --> 00:19:13,629
fisher that the Queen's homeopath he

533
00:19:11,980 --> 00:19:15,460
said well actually the majority of

534
00:19:13,630 --> 00:19:17,110
homeopathic remedies on sale do have

535
00:19:15,460 --> 00:19:19,480
something in it i'll be at small amounts

536
00:19:17,109 --> 00:19:20,979
now that simply isn't true i don't know

537
00:19:19,480 --> 00:19:23,259
where he's got bad information from I

538
00:19:20,980 --> 00:19:25,509
mean I looked across the the big

539
00:19:23,259 --> 00:19:27,339
homeopathic retailers peak like Nelson's

540
00:19:25,509 --> 00:19:29,319
the majority of actually in a quick

541
00:19:27,339 --> 00:19:31,119
analysis of what they sailed them to

542

00:19:29,319 --> 00:19:33,149
sell the majority of them simply have

543
00:19:31,119 --> 00:19:36,099
nothing in I mean because you have the

544
00:19:33,150 --> 00:19:37,960
anything below 12 12 see we have a

545
00:19:36,099 --> 00:19:39,459
gradual limit might still contain

546
00:19:37,960 --> 00:19:41,220
something so if it's typically you'll

547
00:19:39,460 --> 00:19:44,440
buy remedies that are 30 c or above

548
00:19:41,220 --> 00:19:46,450
sometimes you'll buy 6 c which is a one

549
00:19:44,440 --> 00:19:48,519
with 12 zeroes after it that's how how

550
00:19:46,450 --> 00:19:50,288
much how well dilute it is it's not past

551
00:19:48,519 --> 00:19:52,359
the Avogadro limit so it may still be

552
00:19:50,288 --> 00:19:54,038
something in it tiny tiny amounts but

553
00:19:52,359 --> 00:19:56,439
the thing is most places that sell

554
00:19:54,038 --> 00:19:58,569
homeopathy of 40 different homeopathic

555
00:19:56,440 --> 00:20:01,000
treatments 30 of them will be 30 c or

556
00:19:58,569 --> 00:20:02,918

above and they might have 10 6 c1 so

557

00:20:01,000 --> 00:20:04,900
even just looking at it looking at it

558

00:20:02,919 --> 00:20:07,538
like that the majority certainly have

559

00:20:04,900 --> 00:20:09,460
nothing in it and that's a very untrue

560

00:20:07,538 --> 00:20:10,929
statement that mr. Fisher or dr. Fisher

561

00:20:09,460 --> 00:20:12,159
made during that interview it's

562

00:20:10,929 --> 00:20:14,140
unfortunate didn't have the chance to

563

00:20:12,159 --> 00:20:16,330
come back on that and because you don't

564

00:20:14,140 --> 00:20:17,650
to get in a tit-for-tat basically well

565

00:20:16,329 --> 00:20:19,509
and it's also something I've learned

566

00:20:17,650 --> 00:20:21,460
after many years of doing this too is

567

00:20:19,509 --> 00:20:23,769
that when you're in a situation like

568

00:20:21,460 --> 00:20:26,410
that noon you're having some sort of

569

00:20:23,769 --> 00:20:28,879
media debate with somebody and you know

570

00:20:26,410 --> 00:20:30,440
the points and you know what you're

571
00:20:28,880 --> 00:20:32,360
saying is backed up by the evidence and

572
00:20:30,440 --> 00:20:35,180
they make an outrageous statement you

573
00:20:32,359 --> 00:20:38,599
can't always nail it you cannot and you

574
00:20:35,180 --> 00:20:40,310
can lose sleep thinking why didn't I say

575
00:20:38,599 --> 00:20:44,240
this why didn't I say this sometimes you

576
00:20:40,309 --> 00:20:45,619
do you do yeah yeah but it's very sorry

577
00:20:44,240 --> 00:20:47,180
you make a choice about what you're

578
00:20:45,619 --> 00:20:48,949
focusing on and the point that I focused

579
00:20:47,180 --> 00:20:52,279
on which i think is also a very good

580
00:20:48,950 --> 00:20:54,200
argument to use is that we're talking

581
00:20:52,279 --> 00:20:56,990
about something that for five years at

582
00:20:54,200 --> 00:20:58,970
least the NHS the government the every

583
00:20:56,990 --> 00:21:00,829
scientific chief science officer the

584
00:20:58,970 --> 00:21:02,180
British Medical Association they've been

585
00:21:00,829 --> 00:21:04,490
unanimous that this stuff doesn't work

586
00:21:02,180 --> 00:21:06,080
so the NHS has said this thing does not

587
00:21:04,490 --> 00:21:07,789
work and yet we're going to spend five

588
00:21:06,079 --> 00:21:09,349
million pounds a year on it since then

589
00:21:07,789 --> 00:21:11,000
now the point I was making on the show

590
00:21:09,349 --> 00:21:12,619
was that if what we were talking about

591
00:21:11,000 --> 00:21:14,269
was a pharmaceutical rather than

592
00:21:12,619 --> 00:21:16,189
homeopathy there would be nobody

593
00:21:14,269 --> 00:21:17,779
defending that not one person would come

594
00:21:16,190 --> 00:21:18,860
on and say well actually I think we

595
00:21:17,779 --> 00:21:20,089
should have a good look at the evidence

596
00:21:18,859 --> 00:21:21,769
and maybe people should be allowed to

597
00:21:20,089 --> 00:21:24,019
choose it and maybe we should have it

598
00:21:21,769 --> 00:21:25,639
there until more studies done no there

599

00:21:24,019 --> 00:21:27,680
was no there's no way in the world you'd

600
00:21:25,640 --> 00:21:29,240
allow a pharma company to put a drug on

601
00:21:27,680 --> 00:21:30,860
the NHS and spent five million pounds

602
00:21:29,240 --> 00:21:32,839
when the NHS has looked at the evidence

603
00:21:30,859 --> 00:21:34,429
says it does not work we'd be outraged

604
00:21:32,839 --> 00:21:36,259
by this but because it's got home

605
00:21:34,430 --> 00:21:37,810
because it's called homeopathy because

606
00:21:36,259 --> 00:21:40,039
it's got this special privileged status

607
00:21:37,809 --> 00:21:41,720
we like to say well it's patient choice

608
00:21:40,039 --> 00:21:45,470
well patients have a right to choose

609
00:21:41,720 --> 00:21:47,569
between things that work it's deceitful

610
00:21:45,470 --> 00:21:49,339
or certainly incredibly misleading to

611
00:21:47,569 --> 00:21:50,839
give patients a choice of one of two

612
00:21:49,339 --> 00:21:52,339
different things and you know one

613
00:21:50,839 --> 00:21:54,289

doesn't work and you don't tell them

614

00:21:52,339 --> 00:21:55,970
which is which that's not informed

615

00:21:54,289 --> 00:21:58,009
consent you know it's not patient choice

616

00:21:55,970 --> 00:22:00,860
that's a fool's choice you know it's a

617

00:21:58,009 --> 00:22:03,019
it's a it's a broken choice early as

618

00:22:00,859 --> 00:22:05,990
well if I might use a Liverpool analogy

619

00:22:03,019 --> 00:22:07,879
it's a long and winding road I feel the

620

00:22:05,990 --> 00:22:09,109
years well actually there's another big

621

00:22:07,880 --> 00:22:10,820
thing going on with homeopathy at the

622

00:22:09,109 --> 00:22:13,189
moment so i mentioned that that this

623

00:22:10,819 --> 00:22:14,839
blacklisting will prevent a gps

624

00:22:13,190 --> 00:22:16,640
prescribing but that's only one slice of

625

00:22:14,839 --> 00:22:17,839
bird the funding the other way that

626

00:22:16,640 --> 00:22:19,370
we're challenging the funding is to look

627

00:22:17,839 --> 00:22:21,589
at every little bit around the country

628
00:22:19,369 --> 00:22:24,649
and to see whether the way that they

629
00:22:21,589 --> 00:22:26,689
they justify funding actually plays by

630
00:22:24,650 --> 00:22:28,130
the rules is it actually lawful and so I

631
00:22:26,690 --> 00:22:30,350
think I wasn't sure little while ago

632
00:22:28,130 --> 00:22:32,120
talking about this big thing we've been

633
00:22:30,349 --> 00:22:34,519
managed to achieve in Liverpool where

634
00:22:32,119 --> 00:22:35,779
we'd challenge the local health service

635
00:22:34,519 --> 00:22:37,549
to say you've made this decision to

636
00:22:35,779 --> 00:22:38,990
spend money in homeopathy the way you've

637
00:22:37,549 --> 00:22:39,889
made this decision does not go by the

638
00:22:38,990 --> 00:22:41,960
books

639
00:22:39,890 --> 00:22:43,280
we're going to take you to court unless

640
00:22:41,960 --> 00:22:45,470
you rescind the decision and makes it

641
00:22:43,279 --> 00:22:47,389
actually is consult see what you mean

642
00:22:45,470 --> 00:22:48,980
will rescind the decision and have that

643
00:22:47,390 --> 00:22:50,060
consultation open and we've been in

644
00:22:48,980 --> 00:22:51,289
touch with them to make sure we can see

645
00:22:50,059 --> 00:22:53,509
how that consultation is going to be

646
00:22:51,289 --> 00:22:56,240
designed that consultation is now open

647
00:22:53,509 --> 00:22:58,099
and it's open until December 22nd so it

648
00:22:56,240 --> 00:23:00,680
means that again this is an opportunity

649
00:22:58,099 --> 00:23:01,939
for skeptical voices in Liverpool and if

650
00:23:00,680 --> 00:23:03,200
there's any skeptical voice in Liverpool

651
00:23:01,940 --> 00:23:04,640
who don't already know about the merger

652
00:23:03,200 --> 00:23:06,620
I'd skeptic society but do listen to

653
00:23:04,640 --> 00:23:08,570
shore I will be frankly disappointed in

654
00:23:06,619 --> 00:23:10,189
you listeners but yeah so people in

655
00:23:08,569 --> 00:23:12,500
Liverpool can answer if you I think even

656

00:23:10,190 --> 00:23:13,880
if in the UK you can take a survey now

657
00:23:12,500 --> 00:23:15,349
it might well be that at the end they

658
00:23:13,880 --> 00:23:17,360
say well we'll just look at the ones in

659
00:23:15,349 --> 00:23:18,679
livable and you spent two or three

660
00:23:17,359 --> 00:23:20,569
minutes filling something in that

661
00:23:18,680 --> 00:23:22,250
doesn't but isn't helpful but the flip

662
00:23:20,569 --> 00:23:23,750
side is you might they might look at it

663
00:23:22,250 --> 00:23:25,339
and say well the majority of these are

664
00:23:23,750 --> 00:23:26,420
in Liverpool so we'll with them but

665
00:23:25,339 --> 00:23:28,039
these are the ones over here have made

666
00:23:26,420 --> 00:23:30,140
some very good points so it might still

667
00:23:28,039 --> 00:23:31,819
be worth you carelessness dropping over

668
00:23:30,140 --> 00:23:33,800
to the survey and just filling that in

669
00:23:31,819 --> 00:23:35,509
because it really can't harm because I

670
00:23:33,799 --> 00:23:37,339

guarantee there are homeopaths all

671

00:23:35,509 --> 00:23:39,589
around the UK offering their thoughts on

672

00:23:37,339 --> 00:23:42,019
that service so yeah hopefully this is

673

00:23:39,589 --> 00:23:44,299
the first big opportunity we've got to

674

00:23:42,019 --> 00:23:47,809
follow through our legal action and and

675

00:23:44,299 --> 00:23:49,609
push homeopathy onto the agenda and off

676

00:23:47,809 --> 00:23:51,470
the NHS you know if it's if it can't be

677

00:23:49,609 --> 00:23:53,299
lawfully justified so there's a real

678

00:23:51,470 --> 00:23:56,360
opportunity here and this is the first

679

00:23:53,299 --> 00:23:59,089
of what we will do in each different

680

00:23:56,359 --> 00:24:00,439
region that funds it until we either get

681

00:23:59,089 --> 00:24:02,359
rid of it or until they can finally find

682

00:24:00,440 --> 00:24:04,880
a way of saying actually our decision is

683

00:24:02,359 --> 00:24:06,769
completely legal completely lawful you

684

00:24:04,880 --> 00:24:08,960
know as far as we can tell I can't see a

685
00:24:06,769 --> 00:24:09,980
way that it can be but you never know

686
00:24:08,960 --> 00:24:11,930
how these things go but this is

687
00:24:09,980 --> 00:24:13,870
certainly a really great very strong

688
00:24:11,930 --> 00:24:17,900
opportunity for a real success here

689
00:24:13,869 --> 00:24:19,869
that's fantastic so what what our

690
00:24:17,900 --> 00:24:22,759
listeners do should they run to your

691
00:24:19,869 --> 00:24:24,679
website if they haven't done already how

692
00:24:22,759 --> 00:24:26,390
else can they help you well I think the

693
00:24:24,680 --> 00:24:27,950
best thing to do there as there's two

694
00:24:26,390 --> 00:24:29,270
things they can do if you go to the

695
00:24:27,950 --> 00:24:30,680
Merseyside skeptics Society website

696
00:24:29,269 --> 00:24:32,089
we've got a statement up there about

697
00:24:30,680 --> 00:24:33,650
this consultation because obviously it's

698
00:24:32,089 --> 00:24:35,359
a Liverpool thing we want to keep it

699
00:24:33,650 --> 00:24:37,670
with the community group and in good

700
00:24:35,359 --> 00:24:39,859
thinking who I work for as obviously

701
00:24:37,670 --> 00:24:41,090
supporting the MSS who I call run so

702
00:24:39,859 --> 00:24:42,949
it's a slightly odd thing have a good

703
00:24:41,089 --> 00:24:45,309
foot in both camps but it's a it's a

704
00:24:42,950 --> 00:24:48,740
fortunate I said I know what that's like

705
00:24:45,309 --> 00:24:50,240
yes if you got a motorcycle kept excuse

706
00:24:48,740 --> 00:24:52,490
eee a statement there about what you can

707
00:24:50,240 --> 00:24:53,660
do with Thea this uh this consultation

708
00:24:52,490 --> 00:24:54,559
the survey

709
00:24:53,660 --> 00:24:56,210
and the other thing that we need in

710
00:24:54,559 --> 00:24:57,769
terms of good thinking is help funding

711
00:24:56,210 --> 00:24:59,809
our work so obviously this is taken a

712
00:24:57,769 --> 00:25:01,369
lot of time a lot of my time over the

713

00:24:59,809 --> 00:25:03,440
last kind of girl literally hundreds

714
00:25:01,369 --> 00:25:05,239
maybe even thousands of hours by this

715
00:25:03,440 --> 00:25:06,650
point of Alaska you're 18 months to get

716
00:25:05,240 --> 00:25:08,809
to a point where we've got this foothold

717
00:25:06,650 --> 00:25:11,420
and it's taken legal consultation as

718
00:25:08,809 --> 00:25:12,679
well so any listeners who appreciate the

719
00:25:11,420 --> 00:25:14,390
work that we're doing and think that

720
00:25:12,680 --> 00:25:16,670
homeopathy shouldn't be on the NHS in

721
00:25:14,390 --> 00:25:18,080
Liverpool and in the whole country and

722
00:25:16,670 --> 00:25:19,430
want to do something to help than

723
00:25:18,079 --> 00:25:20,929
certainly helping us out with a bit of

724
00:25:19,430 --> 00:25:22,400
funding is it would be absolutely

725
00:25:20,930 --> 00:25:24,980
phenomenal and the way to do that is to

726
00:25:22,400 --> 00:25:27,170
go to good thinking society org forward

727
00:25:24,980 --> 00:25:29,059

slash doughnut and you can either throw

728

00:25:27,170 --> 00:25:31,970

some money in is a one-off or you can

729

00:25:29,059 --> 00:25:34,039

set up a small monthly donation and that

730

00:25:31,970 --> 00:25:36,110

funds all of our work and it's it's are

731

00:25:34,039 --> 00:25:37,849

really one of our very few sources of

732

00:25:36,109 --> 00:25:39,769

funding and it's the kind of thing

733

00:25:37,849 --> 00:25:40,849

that'll keep us going doing the work

734

00:25:39,769 --> 00:25:42,289

we've been doing in the work I've been

735

00:25:40,849 --> 00:25:44,809

talking about on this show when I up

736

00:25:42,289 --> 00:25:46,159

here semi-regularly it'll keep us going

737

00:25:44,809 --> 00:25:47,839

for a lot longer so yeah that's a

738

00:25:46,160 --> 00:25:50,019

that'll be a huge huge bonus for us I

739

00:25:47,839 --> 00:25:53,119

would really really help good thinking

740

00:25:50,019 --> 00:25:55,299

society dot org folks head there good

741

00:25:53,119 --> 00:25:58,939

thinking society org forward slash

742
00:25:55,299 --> 00:26:01,909
donate that's what I'd like all all

743
00:25:58,940 --> 00:26:04,130
skeptics own UK listeners to do in fact

744
00:26:01,910 --> 00:26:05,840
all folks wherever you are around the

745
00:26:04,130 --> 00:26:08,390
world certainly certainly would

746
00:26:05,839 --> 00:26:10,720
recommend a visit to good thinking

747
00:26:08,390 --> 00:26:13,310
society org where you can find out more

748
00:26:10,720 --> 00:26:15,079
marsh it's been a great pleasure once

749
00:26:13,309 --> 00:26:18,319
again to have you on the show as a a

750
00:26:15,079 --> 00:26:20,419
semi-regular sort of contributor which

751
00:26:18,319 --> 00:26:23,480
I'm quite pleased about please give my

752
00:26:20,420 --> 00:26:26,180
best to Simon Singh and family I will do

753
00:26:23,480 --> 00:26:29,240
absolutely he's a he's a top bloke and

754
00:26:26,180 --> 00:26:31,580
as I remind him every time I see him one

755
00:26:29,240 --> 00:26:35,359
of the best books i have ever written on

756

00:26:31,579 --> 00:26:39,169

any topic ever was his code book mmm it

757

00:26:35,359 --> 00:26:41,149

was superb because even somebody like me

758

00:26:39,170 --> 00:26:43,850

after reading that book I understood how

759

00:26:41,150 --> 00:26:45,200

the Enigma machine worked and if anybody

760

00:26:43,849 --> 00:26:46,789

can explain that in such a way that

761

00:26:45,200 --> 00:26:49,309

people like me can understand it that

762

00:26:46,789 --> 00:26:51,230

says enough I think yeah absolutely i

763

00:26:49,309 --> 00:26:53,779

mean yeah when you read Simon's books

764

00:26:51,230 --> 00:26:55,460

he's got a knack of making complicated

765

00:26:53,779 --> 00:26:57,680

things seem straightforward and easy and

766

00:26:55,460 --> 00:26:59,329

that's a it's a real talent so yeah

767

00:26:57,680 --> 00:27:01,310

working with Simon's are always always

768

00:26:59,329 --> 00:27:02,990

been a pleasure and yeah the work we're

769

00:27:01,309 --> 00:27:04,279

doing is great and it's it's always a

770

00:27:02,990 --> 00:27:06,109
pleasure speaking to you as well Richard

771
00:27:04,279 --> 00:27:06,639
I love being on the show thanks Marsh

772
00:27:06,109 --> 00:27:08,039
and I hope

773
00:27:06,640 --> 00:27:29,259
catch up in the not-too-distant future

774
00:27:08,039 --> 00:27:31,750
thank you i hope so I want to help

775
00:27:29,259 --> 00:27:34,420
support the skeptic zonin look pretty

776
00:27:31,750 --> 00:27:39,519
damn stylish while you're about it visit

777
00:27:34,420 --> 00:27:41,860
mr. Katz origami jewelry WWE pegs on TV

778
00:27:39,519 --> 00:27:45,450
and click the link or simply Google mr.

779
00:27:41,859 --> 00:27:49,329
Katz origami jewelry also on Facebook

780
00:27:45,450 --> 00:28:03,850
pendants earrings and cufflinks support

781
00:27:49,329 --> 00:28:08,319
mr. cat support the skeptic zone what we

782
00:28:03,849 --> 00:28:10,949
want is some more evidence please is joe

783
00:28:08,319 --> 00:28:10,950
alabaster

784
00:28:12,098 --> 00:28:18,119

hello this is Joe alabaster

785

00:28:16,059 --> 00:28:18,119
you

786

00:28:18,140 --> 00:28:23,610
the mother of a four month old boy with

787

00:28:20,910 --> 00:28:26,220
pertussis uploaded footage of her son

788

00:28:23,609 --> 00:28:56,309
coughing onto facebook with a passionate

789

00:28:26,220 --> 00:28:58,769
play for people to vaccinate Rebecca

790

00:28:56,309 --> 00:29:01,049
Harriman of Brisbane posted the video a

791

00:28:58,769 --> 00:29:03,389
week ago on the fourteenth of November

792

00:29:01,049 --> 00:29:07,019
alongside her thoughts as she cares for

793

00:29:03,390 --> 00:29:09,450
baby Austin it has since had over 1.5

794

00:29:07,019 --> 00:29:11,849
million views and thirty-two thousand

795

00:29:09,450 --> 00:29:14,809
shares with news stations and sites

796

00:29:11,849 --> 00:29:17,219
around the world picking up the story

797

00:29:14,809 --> 00:29:20,039
alongside hundreds of supportive

798

00:29:17,220 --> 00:29:23,370
messages Rebecca's also received many

799
00:29:20,039 --> 00:29:25,379
from anti-vaccination asst who on top of

800
00:29:23,369 --> 00:29:27,119
criticizing her support for vaccinations

801
00:29:25,380 --> 00:29:29,250
have been causing her trouble by

802
00:29:27,119 --> 00:29:32,219
reporting a family portrait on her

803
00:29:29,250 --> 00:29:34,019
Facebook page for nudity all this as

804
00:29:32,220 --> 00:29:36,630
baby Austin was being taken back to

805
00:29:34,019 --> 00:29:38,160
hospital she has since locked down her

806
00:29:36,630 --> 00:29:40,590
facebook page so that she can

807
00:29:38,160 --> 00:29:43,519
concentrate on her family son and his

808
00:29:40,589 --> 00:29:46,409
health the media coverage on this has

809
00:29:43,519 --> 00:29:48,509
fortunately been incredibly positive a

810
00:29:46,410 --> 00:29:51,779
huge contrast from the days of false

811
00:29:48,509 --> 00:29:53,519
balance on the topic of vaccination as a

812
00:29:51,779 --> 00:29:55,589
demonstration of the caliber of

813
00:29:53,519 --> 00:29:57,809
discourse in the media I'd like to play

814
00:29:55,589 --> 00:30:00,179
for you this segment from ABC's current

815
00:29:57,809 --> 00:30:02,309
affairs panel show the drum which played

816
00:30:00,180 --> 00:30:04,740
on the seventeenth of November and was

817
00:30:02,309 --> 00:30:08,039
hosted by Julia bed featuring michael

818
00:30:04,740 --> 00:30:10,589
Cooney David miles and sunanda Cray with

819
00:30:08,039 --> 00:30:12,990
guests Leigh sales anti-vaccination

820
00:30:10,589 --> 00:30:15,240
activists have bombarded an Australian

821
00:30:12,990 --> 00:30:17,430
woman with messages and attacks after

822
00:30:15,240 --> 00:30:20,130
she posted a facebook video of her son

823
00:30:17,430 --> 00:30:22,200
suffering from whooping cough Rebecca

824
00:30:20,130 --> 00:30:24,330
Harriman from Brisbane wrote for those

825
00:30:22,200 --> 00:30:26,640
of you sitting on the fence on whether

826
00:30:24,329 --> 00:30:28,808
to vaccinate yourself and your kids or

827

00:30:26,640 --> 00:30:31,659
not maybe this video

828
00:30:28,808 --> 00:30:34,058
convince you the Clippers had over half

829
00:30:31,659 --> 00:30:36,100
a million hits in addition to supportive

830
00:30:34,058 --> 00:30:38,349
messages rebecca has received hundreds

831
00:30:36,099 --> 00:30:40,509
of abusive posts for criticizing

832
00:30:38,349 --> 00:30:42,849
anti-vaxxers and she's now set of

833
00:30:40,509 --> 00:30:44,769
Facebook settings to private to focus on

834
00:30:42,849 --> 00:30:46,990
her son's health who is now back in

835
00:30:44,769 --> 00:30:48,099
hospital the last time of writing what

836
00:30:46,990 --> 00:30:50,288
do you make of the power of such a

837
00:30:48,099 --> 00:30:52,269
personal stories and under in all of

838
00:30:50,288 --> 00:30:54,460
this well humans relate to personal

839
00:30:52,269 --> 00:30:55,720
stories don't be and you know scientists

840
00:30:54,460 --> 00:30:58,509
are normally very critical of what they

841
00:30:55,720 --> 00:31:00,700

call anecdotal which is you know my son

842

00:30:58,509 --> 00:31:02,528
did this or my father did that so

843

00:31:00,700 --> 00:31:03,639
therefore such and such and they say

844

00:31:02,528 --> 00:31:06,730
that you know we should look to the

845

00:31:03,638 --> 00:31:08,589
scientific findings and the research

846

00:31:06,730 --> 00:31:12,038
data but in this case the attic data

847

00:31:08,589 --> 00:31:14,888
derogatory to answer me I got it anak

848

00:31:12,038 --> 00:31:16,569
data is definitely but in this case the

849

00:31:14,888 --> 00:31:18,219
anecdotal is doing the work of the

850

00:31:16,569 --> 00:31:20,259
scientists it's convincing people that

851

00:31:18,220 --> 00:31:22,960
there is a problem here and that the the

852

00:31:20,259 --> 00:31:24,700
consequences are really serious hmm it's

853

00:31:22,960 --> 00:31:26,740
really fighting fire with fire as now I

854

00:31:24,700 --> 00:31:29,230
mean what you've got from anti-vaxxers

855

00:31:26,740 --> 00:31:31,089
over time is precisely kind of emotive

856
00:31:29,230 --> 00:31:32,499
rubbish designed to distract and disturb

857
00:31:31,089 --> 00:31:34,569
people and get them to do the wrong

858
00:31:32,499 --> 00:31:35,860
thing by their kids and here's a here's

859
00:31:34,569 --> 00:31:38,048
a case of someone fighting back

860
00:31:35,859 --> 00:31:40,209
essentially which is terrific and a bit

861
00:31:38,048 --> 00:31:42,128
to be applauded it's fantastic what do

862
00:31:40,210 --> 00:31:45,579
you think Lee of like of seeing this

863
00:31:42,128 --> 00:31:47,079
video of this kid almost choking and guy

864
00:31:45,579 --> 00:31:49,960
going blue with something that is

865
00:31:47,079 --> 00:31:51,339
preventable look it just it disturbs me

866
00:31:49,960 --> 00:31:53,379
when people put their faith in things

867
00:31:51,339 --> 00:31:56,199
other than reason evidence and science

868
00:31:53,378 --> 00:31:58,569
and the anti-vaccination view is not

869
00:31:56,200 --> 00:32:01,869
supported by science so you know please

870
00:31:58,569 --> 00:32:04,298
people do not sign up to that nonsense I

871
00:32:01,868 --> 00:32:05,709
mean it's there's this correlate false

872
00:32:04,298 --> 00:32:08,048
correlations that they draw where they

873
00:32:05,710 --> 00:32:09,909
say well you know right to vaccinations

874
00:32:08,048 --> 00:32:11,859
vaccination of increased and so of rates

875
00:32:09,909 --> 00:32:13,778
of autism also of rates of breastfeeding

876
00:32:11,859 --> 00:32:15,278
so let's say it's breastfeeding that's

877
00:32:13,778 --> 00:32:17,200
causing autism like it's just nonsense

878
00:32:15,278 --> 00:32:18,940
number of motor vehicles on the road has

879
00:32:17,200 --> 00:32:19,929
increased dramatically over the years

880
00:32:18,940 --> 00:32:22,480
and I don't think that's linked to

881
00:32:19,929 --> 00:32:24,879
autism either and in fact vaccinations

882
00:32:22,480 --> 00:32:27,669
and autism has been disproved that's it

883
00:32:24,878 --> 00:32:29,678
so many times now that people keep

884

00:32:27,669 --> 00:32:31,509
saying it from one study that was

885
00:32:29,679 --> 00:32:32,950
discredited and the person was did you

886
00:32:31,509 --> 00:32:34,778
know was removed from any medical

887
00:32:32,950 --> 00:32:36,490
register as well so what sort of person

888
00:32:34,778 --> 00:32:38,558
even if you disagree with their views

889
00:32:36,490 --> 00:32:40,149
sends an abusive message to a woman

890
00:32:38,558 --> 00:32:41,190
whose child has whooping cough like I

891
00:32:40,148 --> 00:32:43,589
don't care what you actually

892
00:32:41,190 --> 00:32:45,509
think about her views her child has

893
00:32:43,589 --> 00:32:47,039
whooping cough like just leave it alone

894
00:32:45,509 --> 00:32:48,210
she hasn't slept for three weeks she's

895
00:32:47,039 --> 00:32:50,250
sitting up or not I mean that kind of

896
00:32:48,210 --> 00:32:52,829
anxiety another good honor for putting

897
00:32:50,250 --> 00:32:54,269
it up there it is an example of what

898
00:32:52,829 --> 00:32:57,269

happens when people don't vaccinate

899

00:32:54,269 --> 00:32:58,650

their kids so it is very very clear what

900

00:32:57,269 --> 00:33:00,509

happens and you know I've said it before

901

00:32:58,650 --> 00:33:02,150

I'll say it again a failure to vaccinate

902

00:33:00,509 --> 00:33:05,400

your kids is a form of child abuse

903

00:33:02,150 --> 00:33:07,170

vaccinate your kids shooting illegal

904

00:33:05,400 --> 00:33:09,060

don't you yeah I mean I think

905

00:33:07,170 --> 00:33:10,800

vaccination is a very very sensible

906

00:33:09,059 --> 00:33:12,359

thing to do we flew on it you know put

907

00:33:10,799 --> 00:33:14,730

fluoride in the water we've got very

908

00:33:12,359 --> 00:33:16,199

good reasons for doing so vaccine we're

909

00:33:14,730 --> 00:33:17,190

doing everything that we can or

910

00:33:16,200 --> 00:33:18,509

governments are doing everything they

911

00:33:17,190 --> 00:33:20,910

can to try and make sure people

912

00:33:18,509 --> 00:33:22,619

vaccinate their kids there's no job no

913
00:33:20,910 --> 00:33:25,410
pay now the things that's got Morrison

914
00:33:22,619 --> 00:33:26,719
did as minister to remove religious

915
00:33:25,410 --> 00:33:29,610
exemptions i think is fantastic

916
00:33:26,720 --> 00:33:31,500
conscientious objection is gone it's

917
00:33:29,609 --> 00:33:33,740
only medical reasons are the only reason

918
00:33:31,500 --> 00:33:36,089
you don't can avoid a vaccination

919
00:33:33,740 --> 00:33:38,069
legally right and so they probably hate

920
00:33:36,089 --> 00:33:39,209
the former other government abbott

921
00:33:38,069 --> 00:33:40,619
government for in their view they would

922
00:33:39,210 --> 00:33:41,940
see it as denying the climate change

923
00:33:40,619 --> 00:33:43,859
evidence so I'm sorry kind of it both

924
00:33:41,940 --> 00:33:45,029
ways so if you believe the science on

925
00:33:43,859 --> 00:33:46,949
climate change then you need to believe

926
00:33:45,029 --> 00:33:48,389
the science on vaccination as well so

927
00:33:46,950 --> 00:33:50,160
well and I wonder if it also hit a nerve

928
00:33:48,390 --> 00:33:51,930
because there has been so much a pink

929
00:33:50,160 --> 00:33:54,570
off yeah I mean what do you need

930
00:33:51,930 --> 00:33:56,640
something like 92 or 95% vaccination

931
00:33:54,569 --> 00:33:59,069
rates to get hurt immunity and in some

932
00:33:56,640 --> 00:34:01,560
areas of Sydney you know it's down

933
00:33:59,069 --> 00:34:04,980
around 85 it's lower in other areas the

934
00:34:01,559 --> 00:34:07,559
far north coast there's quite scary low

935
00:34:04,980 --> 00:34:09,449
vaccination rates so babies aren't

936
00:34:07,559 --> 00:34:12,420
provoked it is of course they talk about

937
00:34:09,449 --> 00:34:15,599
whooping cough season you know if that

938
00:34:12,420 --> 00:34:16,920
is not abuse of children I do not know

939
00:34:15,599 --> 00:34:18,989
what is ok we're going to leave it on

940
00:34:16,920 --> 00:34:20,130
that strong note here David that's it

941

00:34:18,989 --> 00:34:21,959
for the drone thanks to our panel

942
00:34:20,130 --> 00:34:24,660
Michael Cooney David miles and sunanda

943
00:34:21,960 --> 00:34:28,679
cray and a special guest lease sales our

944
00:34:24,659 --> 00:34:30,239
website has more as always ABCD a view /

945
00:34:28,679 --> 00:34:34,250
the drum we back again tomorrow night

946
00:34:30,239 --> 00:34:36,779
we'll see you then this is fantastic

947
00:34:34,250 --> 00:34:38,699
primetime television is featuring

948
00:34:36,780 --> 00:34:40,860
conversations on the importance of

949
00:34:38,699 --> 00:34:43,169
making evidence-based health decisions

950
00:34:40,860 --> 00:34:45,960
correlation not being equal to causation

951
00:34:43,170 --> 00:34:47,970
herd immunity the cherry picking nature

952
00:34:45,960 --> 00:34:49,590
of some anti-vaccination campaigners

953
00:34:47,969 --> 00:34:51,419
accepting the science on climate change

954
00:34:49,590 --> 00:34:54,059
but not the science supporting

955
00:34:51,420 --> 00:34:54,898

vaccination not a second is being given

956

00:34:54,059 --> 00:34:56,308
to hearing the

957

00:34:54,898 --> 00:34:58,949
false claims of anti-vaccination

958

00:34:56,309 --> 00:35:02,760
advocates only condemnation of their

959

00:34:58,949 --> 00:35:04,259
views and their behavior five days ago a

960

00:35:02,760 --> 00:35:06,750
whooping cough alert was issued for

961

00:35:04,260 --> 00:35:09,750
Brisbane following a spike in reported

962

00:35:06,750 --> 00:35:11,940
cases there is also an alert in Ipswich

963

00:35:09,750 --> 00:35:14,869
with for infections confirmed in young

964

00:35:11,940 --> 00:35:17,639
children some babies in the past month

965

00:35:14,869 --> 00:35:19,950
just to reminder that pregnant mothers

966

00:35:17,639 --> 00:35:22,019
are recommended to receive pertussis

967

00:35:19,949 --> 00:35:24,298
boosters in their third trimester which

968

00:35:22,019 --> 00:35:26,309
can help protect newborns by a conferred

969

00:35:24,298 --> 00:35:28,469
immunity during those first few months

970
00:35:26,309 --> 00:35:29,910
of life when a baby is too young to have

971
00:35:28,469 --> 00:35:32,129
received the full three doses of

972
00:35:29,909 --> 00:35:34,108
pertussis vaccine it's also worth

973
00:35:32,130 --> 00:35:35,720
chatting with your GP and seeing whether

974
00:35:34,108 --> 00:35:37,588
you're due for a booster vaccine

975
00:35:35,719 --> 00:35:39,659
especially if you're welcoming a new

976
00:35:37,588 --> 00:35:41,960
addition to your family or are likely to

977
00:35:39,659 --> 00:35:44,368
be around any precious newborns our

978
00:35:41,960 --> 00:35:46,528
thoughts are with the harriman family

979
00:35:44,369 --> 00:35:49,410
and we hope that baby austin's recovery

980
00:35:46,528 --> 00:35:52,380
is going well for more evidence please

981
00:35:49,409 --> 00:35:55,558
visit my blog at evidence players dotnet

982
00:35:52,380 --> 00:35:58,190
or catch up with me on twitter at joe

983
00:35:55,559 --> 00:35:58,190
alabaster

984
00:36:09,849 --> 00:36:14,539
welcome to weaken science from RI oz

985
00:36:12,619 --> 00:36:17,449
bringing you the science you need

986
00:36:14,539 --> 00:36:19,820
tonight Sahir Khan Jimmy Anderson and

987
00:36:17,449 --> 00:36:21,710
Damien Fleming a masters of swinging a

988
00:36:19,820 --> 00:36:23,750
cricket ball in the air and I've got the

989
00:36:21,710 --> 00:36:25,309
differences between smooth and turbulent

990
00:36:23,750 --> 00:36:33,980
airflow to thank for their prodigious

991
00:36:25,309 --> 00:36:36,079
abilities when traveling through the air

992
00:36:33,980 --> 00:36:37,730
a cricket ball want to move towards the

993
00:36:36,079 --> 00:36:40,819
side which has the more turbulent

994
00:36:37,730 --> 00:36:42,920
airflow let me explain why to swing your

995
00:36:40,820 --> 00:36:45,260
cricket ball conventionally the seam is

996
00:36:42,920 --> 00:36:47,389
angled to one side meaning that as the

997
00:36:45,260 --> 00:36:49,390
ball flies through the air the smooth

998

00:36:47,389 --> 00:36:52,400
side of the ball causes smooth airflow

999
00:36:49,389 --> 00:36:54,469
but the same trips up the air and causes

1000
00:36:52,400 --> 00:36:56,690
turbulence on the other side the

1001
00:36:54,469 --> 00:36:58,909
turbulent air stays closed or attached

1002
00:36:56,690 --> 00:37:01,579
to the ball for longer than the smooth

1003
00:36:58,909 --> 00:37:03,409
laminar flying side this causes a

1004
00:37:01,579 --> 00:37:04,969
difference in pressure on each side of

1005
00:37:03,409 --> 00:37:07,129
the ball with less pressure on the

1006
00:37:04,969 --> 00:37:09,829
turbulent side making the ball move

1007
00:37:07,130 --> 00:37:11,840
towards the same the maximum amounts of

1008
00:37:09,829 --> 00:37:14,809
side force is generated at a ball and

1009
00:37:11,840 --> 00:37:16,700
speed of around 70 miles per hour what

1010
00:37:14,809 --> 00:37:21,469
happens above that well that's when we

1011
00:37:16,699 --> 00:37:23,509
start getting reverse swing above 85

1012
00:37:21,469 --> 00:37:25,609

miles an hour the air doesn't need

1013

00:37:23,510 --> 00:37:28,010

interference to start becoming turbulent

1014

00:37:25,610 --> 00:37:29,840

on the surface of the ball in this case

1015

00:37:28,010 --> 00:37:32,960

the seam of the ball makes that already

1016

00:37:29,840 --> 00:37:34,850

turbulent air even Messier this extra

1017

00:37:32,960 --> 00:37:36,710

messy air will actually detach from the

1018

00:37:34,849 --> 00:37:38,839

surface quicker than the modelling

1019

00:37:36,710 --> 00:37:40,610

turbulent air on the other side causing

1020

00:37:38,840 --> 00:37:43,010

the low air pressure to be on the

1021

00:37:40,610 --> 00:37:45,380

opposite side and the ball swinging away

1022

00:37:43,010 --> 00:37:47,540

from the same and if the ball is being

1023

00:37:45,380 --> 00:37:49,760

bowled with the same straight the same

1024

00:37:47,539 --> 00:37:51,800

forces are in play but using the smooth

1025

00:37:49,760 --> 00:37:54,860

and rough sides of the ball to create

1026

00:37:51,800 --> 00:37:56,780

different air flows on each side and now

1027
00:37:54,860 --> 00:37:59,140
for fast facts about the science of

1028
00:37:56,780 --> 00:37:59,140
sports

1029
00:37:59,329 --> 00:38:03,710
this is a slightly different effect two

1030
00:38:01,969 --> 00:38:05,989
swinging a soccer ball where the

1031
00:38:03,710 --> 00:38:07,639
horizontal rotation of the ball creates

1032
00:38:05,989 --> 00:38:10,069
differences in air resistance and

1033
00:38:07,639 --> 00:38:11,960
attachment on each side baseball

1034
00:38:10,070 --> 00:38:14,000
pitchers curved the same way to a soccer

1035
00:38:11,960 --> 00:38:16,159
ball the rotation of the ball in one

1036
00:38:14,000 --> 00:38:18,650
direction causes the difference in air

1037
00:38:16,159 --> 00:38:20,569
attachment facing a fast bowler a

1038
00:38:18,650 --> 00:38:22,910
batsman has around half a second to

1039
00:38:20,570 --> 00:38:25,550
assess the trajectory of a ball choose a

1040
00:38:22,909 --> 00:38:27,799
shot and play it and if you're as sick

1041
00:38:25,550 --> 00:38:30,170
as me seeing a bowler ball repeated no

1042
00:38:27,800 --> 00:38:31,970
balls if they move their foot 15

1043
00:38:30,170 --> 00:38:34,159
centimeters backward to remove the

1044
00:38:31,969 --> 00:38:35,899
chance of a no-ball their apparent

1045
00:38:34,159 --> 00:38:38,719
speeds of the batsman would drop by

1046
00:38:35,900 --> 00:38:40,820
around one kilometer per hour that's it

1047
00:38:38,719 --> 00:38:43,099
for this week in science for more

1048
00:38:40,820 --> 00:38:47,920
information on the science of cricket go

1049
00:38:43,099 --> 00:38:51,199
to the Arias website RI aus org a you

1050
00:38:47,920 --> 00:38:53,630
follow us on twitter at ra oz and like

1051
00:38:51,199 --> 00:38:56,199
us on facebook I'm Ben Lawson will catch

1052
00:38:53,630 --> 00:38:56,200
you next week

1053
00:39:11,929 --> 00:39:17,940
hello Richard and all the listeners of

1054
00:39:14,969 --> 00:39:20,849
skeptic zone my name is Ron levy and I'm

1055

00:39:17,940 --> 00:39:23,309
the producer and co-host of curious mind

1056
00:39:20,849 --> 00:39:29,670
it's a podcast about science technology

1057
00:39:23,309 --> 00:39:31,889
and history at wwc em-pod cmp LD dot net

1058
00:39:29,670 --> 00:39:34,139
each episode will bring you interesting

1059
00:39:31,889 --> 00:39:37,199
stories from a wide range of subjects

1060
00:39:34,139 --> 00:39:39,659
from physics astronomy and medicine from

1061
00:39:37,199 --> 00:39:41,489
arts to science fiction we strive for

1062
00:39:39,659 --> 00:39:43,859
the highest production values both in

1063
00:39:41,489 --> 00:39:46,589
content and in delivery we already have

1064
00:39:43,860 --> 00:39:49,110
on the air episodes about German u-boats

1065
00:39:46,590 --> 00:39:52,170
in Second World War about the history of

1066
00:39:49,110 --> 00:39:56,269
x-rays and the war of currents between

1067
00:39:52,170 --> 00:39:59,750
Tesla and Edison come and have a listen

1068
00:39:56,269 --> 00:39:59,750
wwwcom pod

1069
00:40:10,699 --> 00:40:17,899

here's my not spooky action at a

1070

00:40:15,420 --> 00:40:17,900
distance

1071

00:40:19,509 --> 00:40:25,009
he is a skeptic zone favourites jobin

1072

00:40:22,489 --> 00:40:26,749
whom it without her Joe are you joking I

1073

00:40:25,009 --> 00:40:29,150
made out how you pretty good how's your

1074

00:40:26,748 --> 00:40:31,068
of your sexy research been going in

1075

00:40:29,150 --> 00:40:32,509
Melbourne but you just gotta go will

1076

00:40:31,068 --> 00:40:34,248
you're working in a really interesting

1077

00:40:32,509 --> 00:40:37,159
side of signs of the man well i'm

1078

00:40:34,248 --> 00:40:39,048
working in radiation oncology and

1079

00:40:37,159 --> 00:40:40,998
specifically i'm running trials in well

1080

00:40:39,048 --> 00:40:42,918
predominantly trials and take hands up

1081

00:40:40,998 --> 00:40:44,238
all right which you know well I just

1082

00:40:42,918 --> 00:40:45,739
said sexy in the term is like it's

1083

00:40:44,239 --> 00:40:47,329
something that's really relevant and

1084
00:40:45,739 --> 00:40:48,409
really important and did you think

1085
00:40:47,329 --> 00:40:50,749
there's enough work gets done in that

1086
00:40:48,409 --> 00:40:52,938
area or not well i mean i think that to

1087
00:40:50,748 --> 00:40:56,149
one of the two areas that get a huge

1088
00:40:52,938 --> 00:40:57,889
amount of attention in research in well

1089
00:40:56,150 --> 00:41:00,139
generally in oncology are breast cancer

1090
00:40:57,889 --> 00:41:02,358
and prostate cancer hmm and typically in

1091
00:41:00,139 --> 00:41:05,568
the past i think prostate cancer less so

1092
00:41:02,358 --> 00:41:07,548
because I think breast cancer being you

1093
00:41:05,568 --> 00:41:08,869
know predominantly suffered by women it

1094
00:41:07,548 --> 00:41:10,639
had a lot more attention through a lot

1095
00:41:08,869 --> 00:41:14,079
of the the breast cancer advocacy groups

1096
00:41:10,639 --> 00:41:16,608
but nowadays with groups like movember

1097
00:41:14,079 --> 00:41:19,130
prostate cancer and men's issues I think

1098
00:41:16,608 --> 00:41:20,719
are becoming much well it also means

1099
00:41:19,130 --> 00:41:23,869
that every november there's guys getting

1100
00:41:20,719 --> 00:41:26,659
around in a bad porn film looks like you

1101
00:41:23,869 --> 00:41:29,419
know out of it out of a porn media mixer

1102
00:41:26,659 --> 00:41:31,669
actor oh yeah it's good wrestler yeah

1103
00:41:29,418 --> 00:41:33,379
yeah i know that's the only downside of

1104
00:41:31,668 --> 00:41:35,118
it now i'm gonna get into the

1105
00:41:33,380 --> 00:41:37,548
controversial factor of the PSI rating

1106
00:41:35,119 --> 00:41:40,039
because it good yeah PSA really sorry

1107
00:41:37,548 --> 00:41:41,659
yeah i'm now there's been conflict over

1108
00:41:40,039 --> 00:41:42,679
whether you should pay attention to the

1109
00:41:41,659 --> 00:41:44,298
menorah whether you should get one early

1110
00:41:42,679 --> 00:41:45,979
and get a base rate what's the

1111
00:41:44,298 --> 00:41:47,538
scientific thinking on the PSA at the

1112

00:41:45,978 --> 00:41:49,068
moment okay well i mean i can't i can't

1113
00:41:47,539 --> 00:41:51,109
make recommendations because I'm not a

1114
00:41:49,068 --> 00:41:53,150
doctor not a doctor so don't listen too

1115
00:41:51,108 --> 00:41:54,798
closely but I can't tell you yes there

1116
00:41:53,150 --> 00:41:58,009
is a lot of controversy around PSA

1117
00:41:54,798 --> 00:42:00,018
testing and in fact really the way I

1118
00:41:58,009 --> 00:42:01,309
think people should look at PSA and

1119
00:42:00,018 --> 00:42:03,078
incapable for people who don't know what

1120
00:42:01,309 --> 00:42:06,798
it is PSA is prostate specific antigen

1121
00:42:03,079 --> 00:42:09,199
it's a it's a biomarker that can be

1122
00:42:06,798 --> 00:42:11,418
tested in a blood test and if a PSA is

1123
00:42:09,199 --> 00:42:13,159
elevated it can be an indication that

1124
00:42:11,418 --> 00:42:14,418
someone has prostate cancer does that

1125
00:42:13,159 --> 00:42:17,209
mean you have to go right prostate out

1126
00:42:14,418 --> 00:42:19,788

not necessarily know the thing is that

1127

00:42:17,208 --> 00:42:21,198

it's also the PSA can also be raised if

1128

00:42:19,789 --> 00:42:23,119

you have something called benign

1129

00:42:21,199 --> 00:42:24,979

prostatic hypertrophy which is where a

1130

00:42:23,119 --> 00:42:26,588

man gets an a very enlarged prostate or

1131

00:42:24,978 --> 00:42:28,629

if you had a

1132

00:42:26,588 --> 00:42:32,228

re tract infection so there can be lots

1133

00:42:28,630 --> 00:42:34,989

of other pathophysiological conditions

1134

00:42:32,228 --> 00:42:37,659

that can result in PSA being raised so

1135

00:42:34,989 --> 00:42:40,028

that's simply having a high PSA doesn't

1136

00:42:37,659 --> 00:42:42,670

mean you've got prostate cancer but it's

1137

00:42:40,028 --> 00:42:44,318

a good marker for the fact that all the

1138

00:42:42,670 --> 00:42:45,639

PSA is up we need to have a look at

1139

00:42:44,318 --> 00:42:47,108

what's going on we have we've got

1140

00:42:45,639 --> 00:42:49,629

something better than PSA on the horizon

1141
00:42:47,108 --> 00:42:51,460
we do actually funny you should say that

1142
00:42:49,630 --> 00:42:54,460
because that's what I was asking yes so

1143
00:42:51,460 --> 00:42:55,809
anyways I've got a prostate yes well and

1144
00:42:54,460 --> 00:42:57,309
a lot of men don't anymore if they've

1145
00:42:55,809 --> 00:43:00,339
been through the whole rigmarole I did

1146
00:42:57,309 --> 00:43:02,019
as a cancer treatment well but there's a

1147
00:43:00,338 --> 00:43:05,558
new test that's come out recently called

1148
00:43:02,018 --> 00:43:08,258
the PSM a PET scan now this actually is

1149
00:43:05,559 --> 00:43:11,259
more for men who have been diagnosed

1150
00:43:08,259 --> 00:43:13,449
with prostate cancer or where where

1151
00:43:11,259 --> 00:43:16,358
there's well let me just take a step

1152
00:43:13,449 --> 00:43:17,318
back so PSMA is caught is refers to

1153
00:43:16,358 --> 00:43:20,920
something called prostate specific

1154
00:43:17,318 --> 00:43:24,429
membrane antigen and it's found on the

1155
00:43:20,920 --> 00:43:26,950
cells of prostate cancer and and it's a

1156
00:43:24,429 --> 00:43:28,768
it's a can be picked up in a PET scan

1157
00:43:26,949 --> 00:43:30,818
which is a nuclear medicine scan

1158
00:43:28,768 --> 00:43:32,558
previously a lot of the imaging tests

1159
00:43:30,818 --> 00:43:34,119
that we use to look at how we're

1160
00:43:32,559 --> 00:43:37,119
prostate cancer has spread to in the

1161
00:43:34,119 --> 00:43:40,838
body we're not very accurate so MRIs and

1162
00:43:37,119 --> 00:43:43,390
a lot of other imaging scans you know we

1163
00:43:40,838 --> 00:43:44,349
might know that the PSA was up and if

1164
00:43:43,389 --> 00:43:46,150
you've been diagnosed with prostate

1165
00:43:44,349 --> 00:43:48,670
cancer previously then we would be able

1166
00:43:46,150 --> 00:43:49,930
to say PSA is up that can tell us that

1167
00:43:48,670 --> 00:43:51,789
you know there's a likelihood that your

1168
00:43:49,929 --> 00:43:54,129
prostate cancer has come back but if we

1169

00:43:51,789 --> 00:43:56,170
were to do any imaging yeah we might see

1170
00:43:54,130 --> 00:43:58,180
signs of wear the prostate cancer is but

1171
00:43:56,170 --> 00:44:00,338
they're not as accurate as we would have

1172
00:43:58,179 --> 00:44:02,169
liked them to be so there's a new test

1173
00:44:00,338 --> 00:44:04,119
that's been around in Australia for a

1174
00:44:02,170 --> 00:44:06,608
couple of years now called psma testing

1175
00:44:04,119 --> 00:44:08,798
and as I said it's a PET scan the older

1176
00:44:06,608 --> 00:44:10,960
styles of PET scans were not fantastic

1177
00:44:08,798 --> 00:44:13,298
for this is all modern non-invasive to

1178
00:44:10,960 --> 00:44:15,309
know well it's mildly invasive in that

1179
00:44:13,298 --> 00:44:19,960
you have to have a radioactive isotope

1180
00:44:15,309 --> 00:44:21,039
injected into a vein and and that

1181
00:44:19,960 --> 00:44:22,509
travels around the body and gets

1182
00:44:21,039 --> 00:44:25,119
absorbed it gets taken up by the

1183
00:44:22,509 --> 00:44:26,559

prostate cancer cells and it lights up

1184

00:44:25,119 --> 00:44:29,048
on the scan and it tells us where

1185

00:44:26,559 --> 00:44:30,309
prostate cancer has traveled to so for a

1186

00:44:29,048 --> 00:44:31,199
man for example let's say you know

1187

00:44:30,309 --> 00:44:33,000
you've got a

1188

00:44:31,199 --> 00:44:35,939
who was diagnosed with prostate cancer

1189

00:44:33,000 --> 00:44:38,608
ten years ago and if you had your

1190

00:44:35,940 --> 00:44:40,349
prostate removed then the best sign of

1191

00:44:38,608 --> 00:44:42,179
whether your prostate cancer has come

1192

00:44:40,349 --> 00:44:45,660
back is that your PSA is starting to

1193

00:44:42,179 --> 00:44:47,309
rise again so the what then happens is

1194

00:44:45,659 --> 00:44:51,328
we can now send you off to have this

1195

00:44:47,309 --> 00:44:53,130
PSMA PET scan and it can very reliably

1196

00:44:51,329 --> 00:44:54,510
show us where the prostate cancer has

1197

00:44:53,130 --> 00:44:56,849
returned and the reason we want to know

1198
00:44:54,510 --> 00:44:59,010
that is that for men who have never had

1199
00:44:56,849 --> 00:45:00,240
radiotherapy on it so there are number

1200
00:44:59,010 --> 00:45:02,160
of different treatment recommendations

1201
00:45:00,239 --> 00:45:04,139
for prostate cancer you can have your

1202
00:45:02,159 --> 00:45:05,219
prostate removed and have to be honest

1203
00:45:04,139 --> 00:45:07,170
because I don't work on the surgical

1204
00:45:05,219 --> 00:45:09,118
side of things and I'm not an expert in

1205
00:45:07,170 --> 00:45:10,920
radiation radiation oncology either i'm

1206
00:45:09,119 --> 00:45:13,320
at a clinical trial coordinator so my

1207
00:45:10,920 --> 00:45:14,730
knowledge is somewhat limited but you

1208
00:45:13,320 --> 00:45:17,430
can have your prostate removed you could

1209
00:45:14,730 --> 00:45:19,139
have radiotherapy those are the main

1210
00:45:17,429 --> 00:45:21,419
treatments as well as also hormone

1211
00:45:19,139 --> 00:45:25,108
therapy hormone therapy sometimes

1212
00:45:21,420 --> 00:45:26,789
recommended because the hormone in the

1213
00:45:25,108 --> 00:45:28,309
body that actually encourages the growth

1214
00:45:26,789 --> 00:45:31,230
of prostate cancer is testosterone

1215
00:45:28,309 --> 00:45:33,179
alright so for men who have prostate

1216
00:45:31,230 --> 00:45:35,309
cancer it's often recommended that they

1217
00:45:33,179 --> 00:45:36,750
have course of hormone therapy or it can

1218
00:45:35,309 --> 00:45:38,489
be a lengthy course of hormone therapy

1219
00:45:36,750 --> 00:45:40,139
and the side effects of hormone therapy

1220
00:45:38,489 --> 00:45:42,719
are pretty unpleasant they can cause

1221
00:45:40,139 --> 00:45:45,480
depression but people can put on a lot

1222
00:45:42,719 --> 00:45:46,649
of weight you know it really can have a

1223
00:45:45,480 --> 00:45:48,780
significant effect on people's quality

1224
00:45:46,650 --> 00:45:50,309
of life so we want to try and avoid

1225
00:45:48,780 --> 00:45:52,200
those things where we can and we also

1226

00:45:50,309 --> 00:45:54,719
want to avoid giving radiation therapy

1227
00:45:52,199 --> 00:45:56,608
unnecessarily if we don't have to do so

1228
00:45:54,719 --> 00:45:58,679
if a man has had their prostate removed

1229
00:45:56,608 --> 00:46:00,598
and has never had radiation therapy for

1230
00:45:58,679 --> 00:46:02,909
example and they say their PSA goes up

1231
00:46:00,599 --> 00:46:04,950
we know that only thing the body that

1232
00:46:02,909 --> 00:46:06,809
gives off PSA if your process being

1233
00:46:04,949 --> 00:46:08,608
removed must be prostate cancer cells so

1234
00:46:06,809 --> 00:46:10,400
it's a good indication that the prostate

1235
00:46:08,608 --> 00:46:13,278
cancers come back

1236
00:46:10,400 --> 00:46:14,809
and we can look at different ways of

1237
00:46:13,278 --> 00:46:16,338
treating that but for example we may

1238
00:46:14,809 --> 00:46:17,839
want to avoid giving hormone therapy

1239
00:46:16,338 --> 00:46:19,578
unnecessarily or we may want to avoid

1240
00:46:17,838 --> 00:46:21,528

giving radiation therapy to the prostate

1241
00:46:19,579 --> 00:46:23,960
bed because that has side effects it can

1242
00:46:21,528 --> 00:46:26,329
affect erectile function it can affect

1243
00:46:23,960 --> 00:46:27,588
bladder function of bowel function so

1244
00:46:26,329 --> 00:46:30,230
it's really important to be able to

1245
00:46:27,588 --> 00:46:32,210
determine where the cancer is and this

1246
00:46:30,230 --> 00:46:33,679
new PSMA test can really help us

1247
00:46:32,210 --> 00:46:35,750
determine whether the cancer has come

1248
00:46:33,679 --> 00:46:37,190
back outside of where the prostate used

1249
00:46:35,750 --> 00:46:39,469
to be or whether it's come back where

1250
00:46:37,190 --> 00:46:41,358
the prostate used to be and there are

1251
00:46:39,469 --> 00:46:42,980
different ways of treating that and it's

1252
00:46:41,358 --> 00:46:44,778
one of the really important things for

1253
00:46:42,980 --> 00:46:46,190
men is being able to make the best

1254
00:46:44,778 --> 00:46:48,230
decision for themselves about their

1255
00:46:46,190 --> 00:46:50,240
treatment if they had prostate cancer

1256
00:46:48,230 --> 00:46:52,490
and whether or not they may want to go

1257
00:46:50,239 --> 00:46:53,808
on to have a therapy which is going to

1258
00:46:52,489 --> 00:46:56,179
have side effects which are not going to

1259
00:46:53,809 --> 00:46:57,710
actually result in a treatment that is

1260
00:46:56,179 --> 00:46:59,389
going to be beneficial to them so you

1261
00:46:57,710 --> 00:47:00,949
don't want to have radiation therapy if

1262
00:46:59,389 --> 00:47:03,980
you don't actually have any cancer in

1263
00:47:00,949 --> 00:47:07,189
your cross a bed for example now with

1264
00:47:03,980 --> 00:47:09,108
issues like Alzheimer's some issues with

1265
00:47:07,190 --> 00:47:10,490
the eyes and some issues with prostate

1266
00:47:09,108 --> 00:47:12,230
cancer are these things that are showing

1267
00:47:10,489 --> 00:47:13,429
up because we're living longer is that

1268
00:47:12,230 --> 00:47:15,199
part of the thing these are some of the

1269
00:47:13,429 --> 00:47:16,730
things that will come on eventually just

1270
00:47:15,199 --> 00:47:18,528
to be living really long one of them are

1271
00:47:16,730 --> 00:47:19,789
diseases of aging I mean cancer

1272
00:47:18,528 --> 00:47:21,409
Alzheimer's and those sort of things

1273
00:47:19,789 --> 00:47:23,839
we've got an aging population and they

1274
00:47:21,409 --> 00:47:26,000
are diseases of aging so you know you

1275
00:47:23,838 --> 00:47:27,858
get a lot of people who promote a lot of

1276
00:47:26,000 --> 00:47:30,019
the alternative therapies and and so on

1277
00:47:27,858 --> 00:47:31,489
who kind of jump up and down and tell

1278
00:47:30,019 --> 00:47:32,568
you know all the diseases we're

1279
00:47:31,489 --> 00:47:34,338
experiencing it's because of our

1280
00:47:32,568 --> 00:47:35,750
terrible diet and lifestyle and so on

1281
00:47:34,338 --> 00:47:37,278
and does some extent there is you know

1282
00:47:35,750 --> 00:47:39,318
some truth in there we are much more

1283

00:47:37,278 --> 00:47:41,028
sedentary than we used to be but overall

1284
00:47:39,318 --> 00:47:42,318
we have much better nutrition we're

1285
00:47:41,028 --> 00:47:44,028
living longer because of that you know

1286
00:47:42,318 --> 00:47:45,219
you look at the Paleo diet for example

1287
00:47:44,028 --> 00:47:47,599
you know if you look back at the

1288
00:47:45,219 --> 00:47:49,250
Paleolithic man they did not exactly

1289
00:47:47,599 --> 00:47:50,900
have a very long life span nor did they

1290
00:47:49,250 --> 00:47:52,278
not suffer from disease it's just they

1291
00:47:50,900 --> 00:47:53,930
didn't live long enough to suffer from

1292
00:47:52,278 --> 00:47:56,088
the diseases that we now see in humans

1293
00:47:53,929 --> 00:47:57,679
my goodness could they danced my

1294
00:47:56,088 --> 00:47:59,599
goodness could they ever I mean really

1295
00:47:57,679 --> 00:48:02,649
I'm a gook is relative in 230 you're

1296
00:47:59,599 --> 00:48:05,480
gonna really cut around oh I think you

1297
00:48:02,650 --> 00:48:07,760

not like about I have seen some people

1298

00:48:05,480 --> 00:48:09,409
in their 90's who can really hit the

1299

00:48:07,760 --> 00:48:10,880
dance floor I just want to go back to

1300

00:48:09,409 --> 00:48:13,009
one thing botas that I missed about the

1301

00:48:10,880 --> 00:48:14,809
PSA test which you actually asked me the

1302

00:48:13,010 --> 00:48:16,910
most important thing about PSA testing

1303

00:48:14,809 --> 00:48:18,778
and that's where the controversy lies is

1304

00:48:16,909 --> 00:48:21,688
that a lot of people are concerned that

1305

00:48:18,778 --> 00:48:24,088
PSA testing is done too much and that

1306

00:48:21,688 --> 00:48:26,818
men who so prostate cancer generally is

1307

00:48:24,088 --> 00:48:28,438
a fairly slow growing cancer my dad has

1308

00:48:26,818 --> 00:48:31,018
a hobby one of them is going to aldi the

1309

00:48:28,438 --> 00:48:32,699
other one is going to the doctor I think

1310

00:48:31,018 --> 00:48:35,968
a lot of elderly people who are like

1311

00:48:32,699 --> 00:48:36,929
that that is not unusual but you know

1312
00:48:35,969 --> 00:48:38,608
there are men who are in different

1313
00:48:36,929 --> 00:48:40,019
groups so that you can have a very

1314
00:48:38,608 --> 00:48:42,808
strong family history of prostate cancer

1315
00:48:40,018 --> 00:48:45,358
and some who don't and a lot of it is

1316
00:48:42,809 --> 00:48:46,890
about identifying risk and ensuring that

1317
00:48:45,358 --> 00:48:48,719
you have a conversation with your doctor

1318
00:48:46,889 --> 00:48:51,088
about where you fit into that risk group

1319
00:48:48,719 --> 00:48:53,519
so it's worth testing your PSA at the

1320
00:48:51,088 --> 00:48:55,228
age of 85 when you have no risk factors

1321
00:48:53,518 --> 00:48:56,488
and then going on to have treatments

1322
00:48:55,228 --> 00:48:58,558
that are going to you know cause you

1323
00:48:56,489 --> 00:49:00,418
problems where you might be diagnosed

1324
00:48:58,559 --> 00:49:02,009
with prostate cancer that will you know

1325
00:49:00,418 --> 00:49:03,838
you'll die long before it would ever

1326
00:49:02,009 --> 00:49:05,039
have caused you any problems so that's

1327
00:49:03,838 --> 00:49:07,528
where the conversation and the

1328
00:49:05,039 --> 00:49:10,199
controversy years around screening using

1329
00:49:07,528 --> 00:49:11,338
PSA testing so what I'd should you give

1330
00:49:10,199 --> 00:49:13,349
me I mean would someone in their 20s

1331
00:49:11,338 --> 00:49:16,048
bother getting a PSA testing in our

1332
00:49:13,349 --> 00:49:17,699
chinese is very very early I mean look

1333
00:49:16,048 --> 00:49:19,889
you know that I'm actually to be honest

1334
00:49:17,699 --> 00:49:22,019
I actually cannot remember at what age

1335
00:49:19,889 --> 00:49:24,298
they do recommend starting it that is it

1336
00:49:22,018 --> 00:49:26,788
like 50 with the bell look I mean the

1337
00:49:24,298 --> 00:49:30,059
thing is it would be 50 60 s probably

1338
00:49:26,789 --> 00:49:31,709
for fees would be about the age and in

1339
00:49:30,059 --> 00:49:33,298
fact most of the the patients I see

1340

00:49:31,708 --> 00:49:35,399
coming through an hour on the clinical

1341
00:49:33,298 --> 00:49:38,309
trials I'm involved in you know anywhere

1342
00:49:35,400 --> 00:49:40,409
between 50 s up to 80 s it's pretty

1343
00:49:38,309 --> 00:49:43,289
unusual I very unusual to see anyone

1344
00:49:40,409 --> 00:49:45,568
over the age of 50 but it does happen so

1345
00:49:43,289 --> 00:49:47,400
you know really it's all about risk

1346
00:49:45,568 --> 00:49:50,188
assessment and and having a conversation

1347
00:49:47,400 --> 00:49:51,809
with your doctor and you know just just

1348
00:49:50,188 --> 00:49:53,038
being well informed and Joe what's it

1349
00:49:51,809 --> 00:49:54,119
like to hang with the skeptics here in

1350
00:49:53,039 --> 00:49:56,519
Brisbane this time around you're a

1351
00:49:54,119 --> 00:49:57,989
veteran of many conference you've

1352
00:49:56,518 --> 00:49:59,548
embarrassed yourself you've been thrown

1353
00:49:57,989 --> 00:50:01,318
and Ben bet you're not allowed back get

1354
00:49:59,548 --> 00:50:03,809

it back in purple Adelaide you know that

1355

00:50:01,318 --> 00:50:06,358

never oh look I have to say it's been so

1356

00:50:03,809 --> 00:50:08,849

lovely seeing the baton handed on to the

1357

00:50:06,358 --> 00:50:11,429

Brisbane skeptics this year I could

1358

00:50:08,849 --> 00:50:13,559

drink like a drink that yeah I have seen

1359

00:50:11,429 --> 00:50:15,869

I was at the world coming last night so

1360

00:50:13,559 --> 00:50:18,070

yes and they've really done a fabulous

1361

00:50:15,869 --> 00:50:19,870

job really great speakers and

1362

00:50:18,070 --> 00:50:22,630

venue and it's so lovely being up in

1363

00:50:19,869 --> 00:50:24,519

sunny Brisbane so no it's look it's

1364

00:50:22,630 --> 00:50:26,800

always wonderful hanging out with with a

1365

00:50:24,519 --> 00:50:28,840

bunch of people who sort of like minded

1366

00:50:26,800 --> 00:50:30,880

so any any of the skeptics inventive is

1367

00:50:28,840 --> 00:50:33,160

fantastic and just reminding people that

1368

00:50:30,880 --> 00:50:34,510

just go shoot as a career as a nurse you

1369
00:50:33,159 --> 00:50:36,190
can get into all sorts of things you

1370
00:50:34,510 --> 00:50:37,810
don't end up having to work and all you

1371
00:50:36,190 --> 00:50:38,889
don't have to end up working an award or

1372
00:50:37,809 --> 00:50:40,809
there's nothing wrong with that you can

1373
00:50:38,889 --> 00:50:41,980
do lots of different things see nothing

1374
00:50:40,809 --> 00:50:43,630
wrong with working in award and in fact

1375
00:50:41,980 --> 00:50:45,969
some of my most satisfying experiences

1376
00:50:43,630 --> 00:50:48,430
as a nurse we're working on the wards I

1377
00:50:45,969 --> 00:50:49,779
absolutely loved it but I moved on to

1378
00:50:48,429 --> 00:50:51,339
other things the reason I would imagine

1379
00:50:49,780 --> 00:50:52,870
it would be grueling it's not because of

1380
00:50:51,340 --> 00:50:54,670
the physical thing it was a bad job but

1381
00:50:52,869 --> 00:50:56,199
because you're seeing a lot of sadness

1382
00:50:54,670 --> 00:50:58,240
with people and that would be wearing on

1383
00:50:56,199 --> 00:51:00,250
a person emotionally look at a lot of it

1384
00:50:58,239 --> 00:51:02,439
is unfortunately because you know

1385
00:51:00,250 --> 00:51:05,110
nursing as in a lot of healthcare is

1386
00:51:02,440 --> 00:51:07,630
very very under-resourced you know we

1387
00:51:05,110 --> 00:51:09,910
don't have nurses I you know I wouldn't

1388
00:51:07,630 --> 00:51:11,710
say that our pay is is grotesque but I

1389
00:51:09,909 --> 00:51:13,449
certainly don't think nursing pays what

1390
00:51:11,710 --> 00:51:15,340
it should be and there's huge

1391
00:51:13,449 --> 00:51:17,079
disparities between for example you look

1392
00:51:15,340 --> 00:51:19,090
at aged care nurses who work in aged

1393
00:51:17,079 --> 00:51:21,819
care homes to do an amazing job looking

1394
00:51:19,090 --> 00:51:23,740
looking after our vulnerable elderly and

1395
00:51:21,820 --> 00:51:25,809
that's my manual to that job very manual

1396
00:51:23,739 --> 00:51:27,339
very exhausting work and they are they

1397

00:51:25,809 --> 00:51:30,400
are paid a lot less than nurses who work

1398
00:51:27,340 --> 00:51:31,690
in hospitals but you know that this is

1399
00:51:30,400 --> 00:51:35,619
the thing about nursing is that it is

1400
00:51:31,690 --> 00:51:36,849
such a vast career and a profession

1401
00:51:35,619 --> 00:51:39,309
which opens up so many opportunities

1402
00:51:36,849 --> 00:51:41,230
from you know working in a nursing home

1403
00:51:39,309 --> 00:51:42,639
to working on a war to you know doing

1404
00:51:41,230 --> 00:51:44,380
things like what I've done working in an

1405
00:51:42,639 --> 00:51:46,690
endoscopy and then going on to work and

1406
00:51:44,380 --> 00:51:48,400
research you know working in academia

1407
00:51:46,690 --> 00:51:49,929
and in fact what's really interesting

1408
00:51:48,400 --> 00:51:51,430
about nursing is if you actually look at

1409
00:51:49,929 --> 00:51:56,019
some of the work that's been done in

1410
00:51:51,429 --> 00:51:58,269
research some of the the great intensive

1411
00:51:56,019 --> 00:52:00,610

care work a lot of that's been done by

1412

00:51:58,269 --> 00:52:03,219

nurses there's been some really a lot of

1413

00:52:00,610 --> 00:52:04,390

innovation a lot of interesting ideas I

1414

00:52:03,219 --> 00:52:06,939

mean look you know I've had I've had

1415

00:52:04,389 --> 00:52:08,289

some criticism of my own profession in

1416

00:52:06,940 --> 00:52:09,789

the past I won't say that you know

1417

00:52:08,289 --> 00:52:12,039

everything is absolutely fabulous I you

1418

00:52:09,789 --> 00:52:15,009

know I'm known to speak up about the

1419

00:52:12,039 --> 00:52:16,900

fact that there is I will there is a lot

1420

00:52:15,010 --> 00:52:19,300

of woo and some elements of Nursing and

1421

00:52:16,900 --> 00:52:21,039

Midwifery as well you know that it's

1422

00:52:19,300 --> 00:52:24,310

disappointing when you see nurses who

1423

00:52:21,039 --> 00:52:26,529

who have NT wax use or who believe in

1424

00:52:24,309 --> 00:52:28,119

things like therapeutic touch where

1425

00:52:26,530 --> 00:52:29,880

no the nursing profession is a

1426
00:52:28,119 --> 00:52:31,809
science-based profession and

1427
00:52:29,880 --> 00:52:33,220
unfortunately I think some of them some

1428
00:52:31,809 --> 00:52:35,860
of the critical thinking skills that

1429
00:52:33,219 --> 00:52:38,529
should inform what we do don't seem to

1430
00:52:35,860 --> 00:52:40,990
always translate into practice okay but

1431
00:52:38,530 --> 00:52:43,990
there are you know the nursing

1432
00:52:40,989 --> 00:52:46,059
profession is massive in any country and

1433
00:52:43,989 --> 00:52:50,019
there's a huge workforce out there with

1434
00:52:46,059 --> 00:52:52,239
very vast reliefs and and backgrounds so

1435
00:52:50,019 --> 00:52:54,159
it's not entirely surprising something

1436
00:52:52,239 --> 00:52:56,889
and it's a very nimble nimble profession

1437
00:52:54,159 --> 00:52:59,349
to tell me can you on your own flip a

1438
00:52:56,889 --> 00:53:00,940
king-size mattress oh well no log I

1439
00:52:59,349 --> 00:53:02,440
can't flip a king-size mattress however

1440
00:53:00,940 --> 00:53:04,059
I know really handy because that's a car

1441
00:53:02,440 --> 00:53:05,980
thing you have to do as a nurse yeah but

1442
00:53:04,059 --> 00:53:09,159
I can make a bed with someone in it

1443
00:53:05,980 --> 00:53:12,369
which my husband will attest to yes yes

1444
00:53:09,159 --> 00:53:13,779
yes and and what's more is I have taught

1445
00:53:12,369 --> 00:53:15,639
my husband to do Hospital corners

1446
00:53:13,780 --> 00:53:17,350
because I'm sorry if you're going to

1447
00:53:15,639 --> 00:53:19,509
live in my home the bed will have

1448
00:53:17,349 --> 00:53:21,309
Hospital corners not now define that

1449
00:53:19,510 --> 00:53:22,960
again that's the same as I do them in

1450
00:53:21,309 --> 00:53:25,449
hotels isn't it that is the same which

1451
00:53:22,960 --> 00:53:29,590
is walls which well look it's very hard

1452
00:53:25,449 --> 00:53:31,419
to acquire a and a video you rather than

1453
00:53:29,590 --> 00:53:33,160
rather than sound but it's just a very

1454

00:53:31,420 --> 00:53:35,050
welcome to a guy here who just puts the

1455
00:53:33,159 --> 00:53:37,059
fitted sheet on and and and it goes on

1456
00:53:35,050 --> 00:53:39,010
top well no real Hospital corners

1457
00:53:37,059 --> 00:53:40,719
involves in fact you know who would be

1458
00:53:39,010 --> 00:53:42,640
really good at them Richard Richard

1459
00:53:40,719 --> 00:53:44,949
Saunders which is such a anal agenda on

1460
00:53:42,639 --> 00:53:47,589
is it would be really got at them

1461
00:53:44,949 --> 00:53:50,109
because of his origami skills I reckon

1462
00:53:47,590 --> 00:53:52,030
Richard could do fantastic or I get

1463
00:53:50,110 --> 00:53:54,370
Richard Saunders origami skills he could

1464
00:53:52,030 --> 00:53:56,050
yes he could think they can make a mean

1465
00:53:54,369 --> 00:53:57,099
bed thank you for talking to us and by

1466
00:53:56,050 --> 00:53:59,890
the way for the visual people she's

1467
00:53:57,099 --> 00:54:02,230
wearing a Betty Page t-shirt and yes I

1468
00:53:59,889 --> 00:54:03,369

am thank you very much thanks Joe and

1469

00:54:02,230 --> 00:54:06,960

we'll have to have you back on his own

1470

00:54:03,369 --> 00:54:06,960

soon lovely thank you may note

1471

00:54:16,108 --> 00:54:20,679

how much truth is there to claims of

1472

00:54:18,699 --> 00:54:23,049

risk caused by the treatment of beef

1473

00:54:20,679 --> 00:54:24,879

cattle with antibiotics I'm Tamra

1474

00:54:23,050 --> 00:54:30,818

Robertson and you're hooked up to the

1475

00:54:24,880 --> 00:54:32,980

feeding to the feeding tube is the web

1476

00:54:30,818 --> 00:54:36,099

video series that brings you the real

1477

00:54:32,980 --> 00:54:38,559

facts behind popular food myths food

1478

00:54:36,099 --> 00:54:40,930

who is the most pervasive pop

1479

00:54:38,559 --> 00:54:43,420

pseudoscience out there right now and it

1480

00:54:40,929 --> 00:54:45,399

desperately needs debunking each three

1481

00:54:43,420 --> 00:54:48,190

minute episode is suitable for general

1482

00:54:45,400 --> 00:54:51,309

audience and is produced by scientists

1483
00:54:48,190 --> 00:54:55,920
for everyone the feeding tube check it

1484
00:54:51,309 --> 00:54:55,920
out feeding tube TV

1485
00:55:08,579 --> 00:55:12,309
thank you for listening to the skeptic

1486
00:55:10,900 --> 00:55:13,989
zone and if you ever invite Jolla

1487
00:55:12,309 --> 00:55:15,849
bastard to your place for a party make

1488
00:55:13,989 --> 00:55:21,220
sure she brings some peanut butter slice

1489
00:55:15,849 --> 00:55:22,859
oh I'm still recovering in a nice way of

1490
00:55:21,219 --> 00:55:25,268
course in a very nice way of course

1491
00:55:22,858 --> 00:55:27,940
coming up on next week's show another

1492
00:55:25,268 --> 00:55:30,068
Maynard interview maynard's going to be

1493
00:55:27,940 --> 00:55:31,539
speaking to dr. Mel Thompson who gave a

1494
00:55:30,068 --> 00:55:34,690
wonderful talk at the Australian

1495
00:55:31,539 --> 00:55:36,940
skeptics convention a passionate

1496
00:55:34,690 --> 00:55:39,818
supporter of science and reason and the

1497
00:55:36,940 --> 00:55:42,099
health fears I think you'll want to tune

1498
00:55:39,818 --> 00:55:43,778
in do you tune in to a podcast or do you

1499
00:55:42,099 --> 00:55:46,239
just download it I think you'll want to

1500
00:55:43,778 --> 00:55:48,429
download it and tune in for next week's

1501
00:55:46,239 --> 00:55:50,318
episode with them a not speaking to dr.

1502
00:55:48,429 --> 00:55:51,699
Mel Thompson thank you to those people

1503
00:55:50,318 --> 00:55:54,788
who have been supporting the skeptic

1504
00:55:51,699 --> 00:55:58,389
zone by buying some mr. Katz origami

1505
00:55:54,789 --> 00:55:59,829
jewelry ww skeptics on TV there's a link

1506
00:55:58,389 --> 00:56:01,868
there if you scroll down a little bit

1507
00:55:59,829 --> 00:56:06,548
and thank you to those people who send

1508
00:56:01,869 --> 00:56:10,019
letters to Fred the cat Fred the cat let

1509
00:56:06,548 --> 00:56:10,018
me see if he's just outside the door

1510
00:56:20,369 --> 00:56:26,858
there is he's just walking beside me so

1511

00:56:23,619 --> 00:56:30,818
no he's gone round bed Fred you want to

1512
00:56:26,858 --> 00:56:33,848
say hello to the skeptics own fans yes

1513
00:56:30,818 --> 00:56:37,710
he is a cat um I think he's going to

1514
00:56:33,849 --> 00:56:37,710
make up his own mind about this come on

1515
00:56:37,858 --> 00:56:44,130
he's sitting on the floor under a chair

1516
00:56:41,099 --> 00:56:47,469
looking at me as if I've lost my marbles

1517
00:56:44,130 --> 00:56:48,999
he might be right oh well for this week

1518
00:56:47,469 --> 00:56:53,068
this is Richard Saunders and Fred the

1519
00:56:48,998 --> 00:56:53,068
cat signing off from Sydney Australia

1520
00:56:55,210 --> 00:57:00,949
you've been listening to the skeptics

1521
00:56:57,650 --> 00:57:04,340
own podcast visit our website at wwc

1522
00:57:00,949 --> 00:57:07,759
aiptek zoomtv for contacts and archive

1523
00:57:04,340 --> 00:57:10,490
of all episodes since 2008 and our

1524
00:57:07,760 --> 00:57:12,400
online store please support the skeptic

1525
00:57:10,489 --> 00:57:15,559

zone by following us on twitter at

1526

00:57:12,400 --> 00:57:19,190

skeptic zone liking us on facebook and

1527

00:57:15,559 --> 00:57:21,349

leaving a review on iTunes you can also

1528

00:57:19,190 --> 00:57:24,550

show your support by subscribing via

1529

00:57:21,349 --> 00:57:27,319

paypal for as little as 99 cents a week

1530

00:57:24,550 --> 00:57:28,940

the skeptic zone is an independent

1531

00:57:27,320 --> 00:57:31,370

productions the views and opinions

1532

00:57:28,940 --> 00:57:33,590

expressed on the skeptic zone and not

1533

00:57:31,369 --> 00:57:38,679

necessarily those Australian skeptically

1534

00:57:33,590 --> 00:57:38,680

or any other skeptical organization