

A man with glasses and a surprised expression is shown against a dark background with many small, bright stars. The text 'Dr Phil Plat' is written vertically on the right side of the image.

Dr Phil Plat

Show 118
21.Jan.2011

1
00:00:20,500 --> 00:00:09,520
welcome to the skeptic zone the podcast

2
00:00:27,170 --> 00:00:23,240
hello and welcome to the skeptics in

3
00:00:34,010 --> 00:00:27,180
episode number 118 for the twenty first

4
00:00:36,140 --> 00:00:34,020
of January 2011 118 21st 1821 I think

5
00:00:37,820 --> 00:00:36,150
this in numerology going on there this

6
00:00:40,640 --> 00:00:37,830
country 18 is the legal drinking and

7
00:00:43,250 --> 00:00:40,650
voting age in the United States 21 is

8
00:00:45,619 --> 00:00:43,260
the drinking age at least something to

9
00:00:47,829 --> 00:00:45,629
be said about numerology let's worry

10
00:00:51,049 --> 00:00:47,839
about that later on this week's show

11
00:00:53,479 --> 00:00:51,059
Maynard Maynard finally gets to talk to

12
00:00:56,719 --> 00:00:53,489
Phil Plait the bad astronomer and

13
00:00:59,680 --> 00:00:56,729

they'll be discussing the end of the

14

00:01:02,390 --> 00:00:59,690

world and some more important things

15

00:01:05,359 --> 00:01:02,400

following that we have George horeb

16

00:01:07,880 --> 00:01:05,369

singing with Phil Plait of course death

17

00:01:11,359 --> 00:01:07,890

from the skies from his fantastically

18

00:01:15,050 --> 00:01:11,369

good and very well-received album treble

19

00:01:16,550 --> 00:01:15,060

Jay after that I zipped down to

20

00:01:19,670 --> 00:01:16,560

Melbourne where I wonder through

21

00:01:22,760 --> 00:01:19,680

Victoria Queen Victoria markets with my

22

00:01:26,750 --> 00:01:22,770

good friend dr. Steve Roberts what will

23

00:01:29,120 --> 00:01:26,760

we find then we have dr. Richie reports

24

00:01:31,100 --> 00:01:29,130

where dr. Reggie appeared on national

25

00:01:34,010 --> 00:01:31,110

television on a show called the drum

26
00:01:36,740 --> 00:01:34,020
with Steve Canaan to talk about Andrew

27
00:01:39,380 --> 00:01:36,750
Wakefield so dr. Reggie reports this

28
00:01:41,980 --> 00:01:39,390
week is the audio from her national TV

29
00:01:44,750 --> 00:01:41,990
appearance well done dr. Richie and

30
00:01:47,690 --> 00:01:44,760
finally to wrap the show up we have the

31
00:01:49,670 --> 00:01:47,700
Melbourne think tank yes a group of us

32
00:01:52,370 --> 00:01:49,680
got down there in Melbourne around the

33
00:01:56,300 --> 00:01:52,380
table a few nice drinks barbecue on the

34
00:01:58,280 --> 00:01:56,310
way and discuss various skeptical topics

35
00:02:00,830 --> 00:01:58,290
thank you to all those people who have

36
00:02:05,270 --> 00:02:00,840
been signing up to the skeptic zone

37
00:02:07,219 --> 00:02:05,280
newsletter via wwc uptick zone TV wow

38
00:02:08,719 --> 00:02:07,229

the numbers really did skyrocket

39

00:02:11,960 --> 00:02:08,729

recently and I actually had to get an

40

00:02:14,390 --> 00:02:11,970

upgrade in the in the subscription I'm

41

00:02:16,880 --> 00:02:14,400

subscribing to thank you all very much

42

00:02:19,190 --> 00:02:16,890

and if you like the newsletter please

43

00:02:21,740 --> 00:02:19,200

forward it on to your friends and your

44

00:02:23,809 --> 00:02:21,750

enemies and finally if you want to

45

00:02:26,509 --> 00:02:23,819

really help us and dr. Reggie in

46

00:02:28,789 --> 00:02:26,519

particular we are saving up to buy dr.

47

00:02:32,300 --> 00:02:28,799

HC a fantastically good new microphone

48

00:02:33,710 --> 00:02:32,310

so her doctor rachy reports segments

49

00:02:35,420 --> 00:02:33,720

sound even better

50

00:02:37,970 --> 00:02:35,430

and they do now the best way you can

51
00:02:41,330 --> 00:02:37,980
help us if you want to help us in dr. AG

52
00:02:43,820 --> 00:02:41,340
is to become a paypal micro payer for

53
00:02:46,760 --> 00:02:43,830
the skeptic zone for less less than a

54
00:02:49,430 --> 00:02:46,770
dollar a week that really helps us keep

55
00:02:51,170 --> 00:02:49,440
the show on and do things like by dr.

56
00:02:54,140 --> 00:02:51,180
rach gia fantastically good new

57
00:02:56,030 --> 00:02:54,150
microphone you can sign up for less than

58
00:02:58,040 --> 00:02:56,040
a dollar a week for as long as you like

59
00:03:00,770 --> 00:02:58,050
or as short as you like at the website

60
00:03:03,200 --> 00:03:00,780
ok enough from me enough for me I'm

61
00:03:07,310 --> 00:03:03,210
going to race out and have a nice ginger

62
00:03:23,690 --> 00:03:07,320
beer of course yum yum yum while you

63
00:03:29,790 --> 00:03:26,100

yes it was the great meeting of the

64

00:03:31,980 --> 00:03:29,800

minds Maynard and dr. Phil Plait over

65

00:03:34,020 --> 00:03:31,990

Skype and over telephone because i think

66

00:03:37,650 --> 00:03:34,030

the enemies of reason we're trying to

67

00:03:40,410 --> 00:03:37,660

sabotage the whole thing may not started

68

00:03:43,800 --> 00:03:40,420

off by asking Phil Plait about his TV

69

00:03:47,120 --> 00:03:43,810

show bad universe and why he destroyed

70

00:03:51,990 --> 00:03:50,309

we needed to pick someplace to show what

71

00:03:55,380 --> 00:03:52,000

it would be like when it gets hit by a

72

00:03:57,270 --> 00:03:55,390

big rock and in the movies and TV shows

73

00:03:59,640 --> 00:03:57,280

at least in America they keep showing

74

00:04:02,400 --> 00:03:59,650

the same places we've seen London hit

75

00:04:05,040 --> 00:04:02,410

we've seen San Francisco and New York

76

00:04:07,890 --> 00:04:05,050

and and France Paris any place has a

77

00:04:09,530 --> 00:04:07,900

landmark and we have a team who was

78

00:04:12,090 --> 00:04:09,540

researching this and they found that

79

00:04:15,449 --> 00:04:12,100

Sydney had never been hit by an asteroid

80

00:04:17,370 --> 00:04:15,459

on TV and it has really well to find

81

00:04:19,890 --> 00:04:17,380

landmarks you've got the Opera House and

82

00:04:22,530 --> 00:04:19,900

the Harbour Bridge and those are iconic

83

00:04:24,120 --> 00:04:22,540

so we decided to pick them and I wound

84

00:04:25,950 --> 00:04:24,130

up apologizing a lot to all my

85

00:04:27,510 --> 00:04:25,960

Australian friends now what was the saws

86

00:04:29,970 --> 00:04:27,520

of the asteroid and how fast was it

87

00:04:32,730 --> 00:04:29,980

going we just sort of give a size of

88

00:04:34,680 --> 00:04:32,740

about a kilometer we don't we don't make

89

00:04:37,020 --> 00:04:34,690

it I think to specific simply because

90

00:04:39,020 --> 00:04:37,030

that's sort of a lower limit of the size

91

00:04:40,920 --> 00:04:39,030

you need to start having global

92

00:04:44,219 --> 00:04:40,930

consequences if you have something

93

00:04:45,900 --> 00:04:44,229

that's a hundred metres across its local

94

00:04:47,070 --> 00:04:45,910

it'll it'll wipe out a city or something

95

00:04:49,290 --> 00:04:47,080

like that and the bigger it gets the

96

00:04:51,690 --> 00:04:49,300

more damage does in fact in this one we

97

00:04:53,820 --> 00:04:51,700

do give a size because we compare it to

98

00:04:55,740 --> 00:04:53,830

our explosion of course s droids on

99

00:04:58,590 --> 00:04:55,750

explosive that is travelling really fast

100

00:05:00,450 --> 00:04:58,600

so how do you convert the kinetic energy

101
00:05:01,620 --> 00:05:00,460
into explosive energy how do you let

102
00:05:03,420 --> 00:05:01,630
that app well that's a really good

103
00:05:05,340 --> 00:05:03,430
question in fact a long time ago has

104
00:05:06,900 --> 00:05:05,350
asked if a comet hits us and it's made

105
00:05:08,760 --> 00:05:06,910
of ice why does it set things on fire

106
00:05:10,050 --> 00:05:08,770
that was a good question i'd never

107
00:05:12,480 --> 00:05:10,060
thought of it and the reason is because

108
00:05:13,980 --> 00:05:12,490
there's an energy involved with motion

109
00:05:15,600 --> 00:05:13,990
if you have a big rock and it's just

110
00:05:17,430 --> 00:05:15,610
sitting there it's just sitting there

111
00:05:19,409 --> 00:05:17,440
there's no energy in it but if you start

112
00:05:21,360 --> 00:05:19,419
moving it it takes energy to move it and

113
00:05:23,490 --> 00:05:21,370

it takes energy to stop it and the

114

00:05:26,040 --> 00:05:23,500

faster it's moving the more energy it

115

00:05:28,140 --> 00:05:26,050

has and these asteroids are huge they

116

00:05:30,420 --> 00:05:28,150

could weigh billions of tons and they're

117

00:05:32,490 --> 00:05:30,430

moving at many many many kilometers per

118

00:05:35,730 --> 00:05:32,500

second even something a hundred metres

119

00:05:40,800 --> 00:05:35,740

across when it hits could explode like

120

00:05:43,170 --> 00:05:40,810

20 million tons of TNT 20 megatons but

121

00:05:45,060 --> 00:05:43,180

you know if something a mile wide hits

122

00:05:47,670 --> 00:05:45,070

there's no place in Australia to be safe

123

00:05:48,960 --> 00:05:47,680

yeah it depends on where you are I mean

124

00:05:50,850 --> 00:05:48,970

if you're if you're within a certain

125

00:05:53,130 --> 00:05:50,860

distance there's going to be the flash

126

00:05:54,240 --> 00:05:53,140

of heat that will simply vaporize

127

00:05:56,730 --> 00:05:54,250

anything that that's within

128

00:05:58,380 --> 00:05:56,740

line-of-sight of it farther away yeah

129

00:06:00,629 --> 00:05:58,390

there's a pressure wave just basically a

130

00:06:02,700 --> 00:06:00,639

super sound wave that could basic

131

00:06:04,739 --> 00:06:02,710

you know turn you into I think cottage

132

00:06:06,179 --> 00:06:04,749

cheese is the word I used feel I've

133

00:06:08,129 --> 00:06:06,189

gotta ask you a few speculative

134

00:06:09,899 --> 00:06:08,139

questions here but even some speculation

135

00:06:11,730 --> 00:06:09,909

sure what do you think about the whole

136

00:06:13,469 --> 00:06:11,740

thing about disclosure do you think one

137

00:06:15,989 --> 00:06:13,479

day the American government will say oh

138

00:06:17,850 --> 00:06:15,999

yeah all along UFOs are real and we knew

139

00:06:19,559 --> 00:06:17,860

it do you think that will ever happen no

140

00:06:21,779 --> 00:06:19,569

because I don't think there's anything

141

00:06:23,670 --> 00:06:21,789

to that because the speed of light

142

00:06:24,959 --> 00:06:23,680

barrier yes that's that's not the

143

00:06:27,119 --> 00:06:24,969

direction i was thinking what I was

144

00:06:29,999 --> 00:06:27,129

thinking is that I just don't think that

145

00:06:33,749 --> 00:06:30,009

the vast majority and by vast majority I

146

00:06:36,809 --> 00:06:33,759

mean 99 plus percent of UFO reports are

147

00:06:39,899 --> 00:06:36,819

credible people are very easily fooled

148

00:06:42,390 --> 00:06:39,909

it's very easy to think that a satellite

149

00:06:44,820 --> 00:06:42,400

in the sky or a meteor or seriously

150

00:06:48,209 --> 00:06:44,830

Venus Venus is reported as the UFO all

151
00:06:50,219 --> 00:06:48,219
the time just last year or was it about

152
00:06:51,809 --> 00:06:50,229
a year and a half ago in the u.s. there

153
00:06:55,290 --> 00:06:51,819
were there were news reports and all

154
00:06:57,240 --> 00:06:55,300
this stuff about a UFO over a lake one

155
00:07:00,450 --> 00:06:57,250
of the great lakes and it was clearly

156
00:07:03,059 --> 00:07:00,460
Venus clearly so you know a lot of these

157
00:07:04,920 --> 00:07:03,069
reports aren't right and and I just

158
00:07:07,469 --> 00:07:04,930
don't see it happening and yes from that

159
00:07:10,230 --> 00:07:07,479
angle I just don't see aliens coming

160
00:07:12,420 --> 00:07:10,240
here to visit us fly around in our skies

161
00:07:13,920 --> 00:07:12,430
and then leave it just doesn't make any

162
00:07:16,139 --> 00:07:13,930
sense to me especially not in the

163
00:07:18,179 --> 00:07:16,149

numbers that are that are reported so I

164

00:07:20,129 --> 00:07:18,189

don't think aliens are visiting us I

165

00:07:21,749 --> 00:07:20,139

think there's life out there I think

166

00:07:24,029 --> 00:07:21,759

what we're learning about the physics of

167

00:07:26,999 --> 00:07:24,039

the way planets evolved I think that

168

00:07:28,439 --> 00:07:27,009

that pretty much guarantees that there's

169

00:07:30,209 --> 00:07:28,449

going to be life out there we're on the

170

00:07:33,029 --> 00:07:30,219

verge of finding planets like the earth

171

00:07:34,649 --> 00:07:33,039

now I think in five years we'll know

172

00:07:36,300 --> 00:07:34,659

whether there are planets like the earth

173

00:07:38,490 --> 00:07:36,310

out there or not and I think we'll know

174

00:07:40,290 --> 00:07:38,500

in the positive but we just don't know

175

00:07:42,689 --> 00:07:40,300

about life out there right now and I I

176

00:07:45,269 --> 00:07:42,699

don't think there's enough of that to

177

00:07:48,019 --> 00:07:45,279

get here and investigate us so no i'm

178

00:07:50,309 --> 00:07:48,029

i'm not a big big proponent of

179

00:07:53,010 --> 00:07:50,319

government disclosure stuff where do you

180

00:07:55,230 --> 00:07:53,020

sit with the Tunguska event comet

181

00:07:57,029 --> 00:07:55,240

antimatter what do you think it was as

182

00:07:59,429 --> 00:07:57,039

an astronomer come on were you there

183

00:08:00,809 --> 00:07:59,439

feel uh no was not there now what you're

184

00:08:03,659 --> 00:08:00,819

talking about is the Tunguska event

185

00:08:06,899 --> 00:08:03,669

which was in 1908 its engines explosion

186

00:08:09,629 --> 00:08:06,909

Ella Krakatoa or some volcanic

187

00:08:11,399 --> 00:08:09,639

explosions are bigger this released the

188

00:08:14,250 --> 00:08:11,409

energy of roughly a 20 Megaton nuclear

189

00:08:16,860 --> 00:08:14,260

bomb and what was it now when I was

190

00:08:18,270 --> 00:08:16,870

kid I remember reading about it could have

191

00:08:19,770 --> 00:08:18,280

been antimatter could have been a black

192

00:08:22,440 --> 00:08:19,780

hole it could have been a UFO and the

193

00:08:24,450 --> 00:08:22,450

reason people speculate so much about

194

00:08:25,860 --> 00:08:24,460

what it is is because there's no crater

195

00:08:27,780 --> 00:08:25,870

there was an expedition that went there

196

00:08:29,850 --> 00:08:27,790

about 20 years later and they found no

197

00:08:31,170 --> 00:08:29,860

crater but they did find all the trees

198

00:08:33,570 --> 00:08:31,180

were knocked down and had been set on

199

00:08:36,060 --> 00:08:33,580

fire so clearly this was a very

200

00:08:38,760 --> 00:08:36,070

energetic event well we found out much

201
00:08:40,290 --> 00:08:38,770
much much later and I mean 20 years ago

202
00:08:41,580 --> 00:08:40,300
something like that I was in grad school

203
00:08:44,130 --> 00:08:41,590
and people were just starting figure

204
00:08:46,650 --> 00:08:44,140
this out that you can have asteroids or

205
00:08:48,720 --> 00:08:46,660
comets that will explode in the air and

206
00:08:51,450 --> 00:08:48,730
this release is a huge amount of energy

207
00:08:53,580 --> 00:08:51,460
and can set fire to a lot of the land

208
00:08:55,500 --> 00:08:53,590
but it doesn't leave a crater because

209
00:08:57,780 --> 00:08:55,510
there's no physical impact with the

210
00:08:59,940 --> 00:08:57,790
ground we're almost a hundred percent

211
00:09:02,100 --> 00:08:59,950
positive that this really was just a

212
00:09:04,440 --> 00:09:02,110
chunk of rock or ice that blew up in the

213
00:09:06,300 --> 00:09:04,450

atmosphere fulfilled plate is their son

214

00:09:08,040 --> 00:09:06,310

like astronomical event you haven't seen

215

00:09:10,770 --> 00:09:08,050

in your lifetime that you'd like to see

216

00:09:12,960 --> 00:09:10,780

that maybe won't kill us oh yeah total

217

00:09:14,040 --> 00:09:12,970

solar eclipse never seen one everybody

218

00:09:15,510 --> 00:09:14,050

tells me you've seen one it's

219

00:09:16,890 --> 00:09:15,520

life-changing it's one of the most

220

00:09:20,070 --> 00:09:16,900

desperately beautiful things you'll ever

221

00:09:22,080 --> 00:09:20,080

see why did you bag Pluto you one of

222

00:09:24,240 --> 00:09:22,090

those guys who voted Pluto out of the

223

00:09:25,770 --> 00:09:24,250

solar system no I had nothing to do with

224

00:09:27,540 --> 00:09:25,780

that I wasn't at that meeting I've gone

225

00:09:29,250 --> 00:09:27,550

back and forth on this a lot I've talked

226

00:09:30,690 --> 00:09:29,260

to a lot of friends of mine including

227

00:09:33,600 --> 00:09:30,700

some astronomers who were involved with

228

00:09:35,310 --> 00:09:33,610

that and I think that the idea of voting

229

00:09:36,660 --> 00:09:35,320

on whether Pluto is a planet or voting

230

00:09:38,370 --> 00:09:36,670

on the rules of what should be a planet

231

00:09:40,140 --> 00:09:38,380

or not to me it's silly now how do you

232

00:09:41,580 --> 00:09:40,150

feel about the ilkook lab i reckon

233

00:09:43,500 --> 00:09:41,590

that's pretty cool well the Oort cloud

234

00:09:45,560 --> 00:09:43,510

is this it's it's still a theoretical

235

00:09:48,090 --> 00:09:45,570

concept that there's this repository of

236

00:09:49,290 --> 00:09:48,100

gazillions of comets way out in the

237

00:09:52,470 --> 00:09:49,300

solar system and we've never actually

238

00:09:54,870 --> 00:09:52,480

seen it but we did predict that there

239

00:09:57,510 --> 00:09:54,880

would be sort of an intermediate cluster

240

00:09:59,430 --> 00:09:57,520

of these things between us and it which

241

00:10:02,010 --> 00:09:59,440

is called the edgeworth Kuiper belt and

242

00:10:03,120 --> 00:10:02,020

in fact that has been seen which lends a

243

00:10:05,280 --> 00:10:03,130

lot of credence to the fact that this

244

00:10:07,080 --> 00:10:05,290

cloud is out there and it may have you

245

00:10:08,610 --> 00:10:07,090

know billions of these things out there

246

00:10:10,830 --> 00:10:08,620

and that's where our long-term comets

247

00:10:12,180 --> 00:10:10,840

come from and of course in Independence

248

00:10:14,580 --> 00:10:12,190

Day that's where the aliens big

249

00:10:16,020 --> 00:10:14,590

spaceship hid before it came out and if

250

00:10:17,880 --> 00:10:16,030

you were trying to hide be the place to

251
00:10:19,260 --> 00:10:17,890
be or you'd come from the Sun wouldn't

252
00:10:20,730 --> 00:10:19,270
you say we couldn't see it yeah that's

253
00:10:22,620 --> 00:10:20,740
actually hard I guess it depends on how

254
00:10:24,510 --> 00:10:22,630
fast your ship moves people think you

255
00:10:26,940 --> 00:10:24,520
know just moving a spaceship around is

256
00:10:28,170 --> 00:10:26,950
like driving a car but it's not it's

257
00:10:29,579 --> 00:10:28,180
like driving a

258
00:10:30,960 --> 00:10:29,589
r if your house is moving a hundred

259
00:10:32,670 --> 00:10:30,970
miles an hour in one direction in your

260
00:10:34,470 --> 00:10:32,680
garage is moving 100 miles an hour in

261
00:10:36,210 --> 00:10:34,480
the other everything's moving and it's

262
00:10:38,550 --> 00:10:36,220
really hard to just you can't just point

263
00:10:40,650 --> 00:10:38,560

an aim and go you have to predict where

264

00:10:42,150 --> 00:10:40,660

your your targets gonna be when you get

265

00:10:44,610 --> 00:10:42,160

there and so it's hard to just come out

266

00:10:47,400 --> 00:10:44,620

of the Sun it'd be really really hard

267

00:10:53,400 --> 00:10:47,410

for aliens to sneak up on us chances are

268

00:10:55,380 --> 00:10:53,410

we'd see him hello for those people that

269

00:10:56,610 --> 00:10:55,390

wonder like is he suddenly gone under

270

00:10:57,810 --> 00:10:56,620

the water or something our skype

271

00:10:59,790 --> 00:10:57,820

connection just wasn't behaving itself

272

00:11:01,260 --> 00:10:59,800

was it Phil no not terribly well

273

00:11:03,210 --> 00:11:01,270

sometimes that happens we were just

274

00:11:04,800 --> 00:11:03,220

talking about near abu there and i was

275

00:11:06,840 --> 00:11:04,810

just saying that as an astronomer when

276

00:11:09,090 --> 00:11:06,850

people go on about these planets that

277

00:11:11,970 --> 00:11:09,100

you and everyone else in the business is

278

00:11:13,530 --> 00:11:11,980

pretty sure exactly does not exist how

279

00:11:15,389 --> 00:11:13,540

do you not go ballistic about it when

280

00:11:18,180 --> 00:11:15,399

you hear it over and over and over again

281

00:11:19,829 --> 00:11:18,190

it can be very tough but in this case

282

00:11:21,240 --> 00:11:19,839

it's even harder because there are

283

00:11:23,730 --> 00:11:21,250

people out there who were scared by this

284

00:11:25,440 --> 00:11:23,740

and this whole planet x thing you can go

285

00:11:27,750 --> 00:11:25,450

back into the internet archives and find

286

00:11:29,639 --> 00:11:27,760

people who were you know selling their

287

00:11:30,600 --> 00:11:29,649

houses trying to move to safe locations

288

00:11:33,360 --> 00:11:30,610

because they thought this thing was

289

00:11:35,760 --> 00:11:33,370

coming in 2003 and in fact this planet

290

00:11:37,530 --> 00:11:35,770

doesn't exist we know if there were

291

00:11:39,720 --> 00:11:37,540

something like Mars to land through the

292

00:11:41,220 --> 00:11:39,730

solar system all the planets orbits

293

00:11:42,690 --> 00:11:41,230

would be all messed up and and the

294

00:11:45,300 --> 00:11:42,700

people talking about this are talking

295

00:11:47,519 --> 00:11:45,310

about a planet much bigger than Mars so

296

00:11:50,490 --> 00:11:47,529

clearly this thing doesn't exist so it's

297

00:11:52,500 --> 00:11:50,500

pretty easy to say no that it that's

298

00:11:53,940 --> 00:11:52,510

wrong but it still scares people and

299

00:11:57,180 --> 00:11:53,950

that's very upsetting to me and what

300

00:11:59,370 --> 00:11:57,190

about Apophis that's the asteroid that's

301
00:12:01,050 --> 00:11:59,380
going to come really really close to us

302
00:12:04,850 --> 00:12:01,060
now see that's that's a real thing

303
00:12:07,920 --> 00:12:04,860
Apophis is not going to hit us in 20 29

304
00:12:09,600 --> 00:12:07,930
but it is going to pass very close to

305
00:12:11,220 --> 00:12:09,610
the earth it's going to pass so close we

306
00:12:13,019 --> 00:12:11,230
can't really know exactly what's going

307
00:12:14,640 --> 00:12:13,029
to happen to its orbit and it's possible

308
00:12:16,800 --> 00:12:14,650
that seven years later it will come back

309
00:12:19,560 --> 00:12:16,810
and hit us now the odds of that are

310
00:12:20,550 --> 00:12:19,570
incredibly low and we don't think it's

311
00:12:23,220 --> 00:12:20,560
going to happen it's like one in a

312
00:12:24,690 --> 00:12:23,230
million it's very low but someday there

313
00:12:26,880 --> 00:12:24,700

will be an asteroid that's going to do

314

00:12:29,010 --> 00:12:26,890

this so Apophis is a really good test

315

00:12:30,480 --> 00:12:29,020

case for us I'm not worried about it I

316

00:12:32,310 --> 00:12:30,490

don't think it's going to hit but it is

317

00:12:34,440 --> 00:12:32,320

something we should study and learn from

318

00:12:36,269 --> 00:12:34,450

so that when the day comes we will be

319

00:12:38,370 --> 00:12:36,279

able to do something and look at your

320

00:12:40,960 --> 00:12:38,380

dacha on the Discovery Channel Apophis

321

00:12:42,730 --> 00:12:40,970

is it shaped like a hippo

322

00:12:45,100 --> 00:12:42,740

we don't actually know what apophysis

323

00:12:47,619 --> 00:12:45,110

shape like oh okay so you bit of

324

00:12:50,050 --> 00:12:47,629

artistic endeavor look like a potato or

325

00:12:51,460 --> 00:12:50,060

bit of a hippo yeah potato they're the

326

00:12:53,619 --> 00:12:51,470

model we used was just something that

327

00:12:55,030 --> 00:12:53,629

was based on some observations but we

328

00:12:56,920 --> 00:12:55,040

don't really know what it's shaped like

329

00:12:58,960 --> 00:12:56,930

we know that a lot of asteroids are kind

330

00:13:00,550 --> 00:12:58,970

of potato shaped so that was just a

331

00:13:02,490 --> 00:13:00,560

model to give you an idea of what it

332

00:13:05,050 --> 00:13:02,500

might be like now how do you get on with

333

00:13:07,360 --> 00:13:05,060

astrologers has been a bit of a haha on

334

00:13:09,220 --> 00:13:07,370

the BBC this week some astronomers over

335

00:13:10,480 --> 00:13:09,230

there said something I don't know

336

00:13:12,879 --> 00:13:10,490

exactly what it was but quite an

337

00:13:17,559 --> 00:13:12,889

unfavorable about astrologist do us all

338

00:13:19,629 --> 00:13:17,569

just get on no not terribly well that

339

00:13:21,220 --> 00:13:19,639

whole thing was so ridiculous it was

340

00:13:23,499 --> 00:13:21,230

just some astronomers saying you know

341

00:13:25,509 --> 00:13:23,509

the the signs of the zodiac have changed

342

00:13:26,800 --> 00:13:25,519

over the past few thousand years this

343

00:13:30,129 --> 00:13:26,810

this is nothing new we've known about

344

00:13:32,949 --> 00:13:30,139

this for centuries but somehow the media

345

00:13:35,050 --> 00:13:32,959

translated this as astronomers add new

346

00:13:38,470 --> 00:13:35,060

sign to the zodiac and it's got spread

347

00:13:41,110 --> 00:13:38,480

through Twitter and everywhere and it

348

00:13:44,110 --> 00:13:41,120

was just it was so silly and in the

349

00:13:46,059 --> 00:13:44,120

meantime to me astrology is nonsense it

350

00:13:48,429 --> 00:13:46,069

doesn't make any sense there's no way

351

00:13:50,829 --> 00:13:48,439

that position of the Sun when you were

352

00:13:52,360 --> 00:13:50,839

born can have any influence on you and

353

00:13:55,210 --> 00:13:52,370

it's been tested over and over again and

354

00:13:56,650 --> 00:13:55,220

shown not to work so it's not just you

355

00:13:58,689 --> 00:13:56,660

can't prove it works we can actually

356

00:14:00,670 --> 00:13:58,699

show it doesn't and yet people still

357

00:14:02,290 --> 00:14:00,680

believe in it and it's it's because like

358

00:14:03,999 --> 00:14:02,300

you said earlier it's maddening where

359

00:14:06,400 --> 00:14:04,009

did you get that catchphrase of yours a

360

00:14:11,019 --> 00:14:06,410

holy alcala kala kala is it a muppets

361

00:14:13,119 --> 00:14:11,029

thing no and and that that's a whole

362

00:14:15,610 --> 00:14:13,129

thing what I've been saying it for years

363

00:14:18,340 --> 00:14:15,620

it's the name of a volcano in Hawaii

364

00:14:20,079 --> 00:14:18,350

it's haleakala and there was a TV show

365

00:14:21,850 --> 00:14:20,089

back in the 80s I used to watch and

366

00:14:23,860 --> 00:14:21,860

somebody actually said holy haleakala

367

00:14:26,019 --> 00:14:23,870

while they were on vacation there and it

368

00:14:27,549 --> 00:14:26,029

just struck me as funny I I said it at

369

00:14:30,160 --> 00:14:27,559

one point while we were filming my

370

00:14:31,960 --> 00:14:30,170

producer liked it so I said it a few

371

00:14:33,369 --> 00:14:31,970

more times and I said you know just use

372

00:14:34,689 --> 00:14:33,379

a couple of it use it a couple of times

373

00:14:36,400 --> 00:14:34,699

and he went abusing it like I don't even

374

00:14:37,480 --> 00:14:36,410

know seven times or something crazy I

375

00:14:40,480 --> 00:14:37,490

thought it might have been I walk the

376

00:14:42,809 --> 00:14:40,490

dinosaur was not was thing oh oh I can i

377

00:14:44,999 --> 00:14:42,819

connect a boom boom boom I like

378

00:14:46,919 --> 00:14:45,009

boom no not like that that's a great

379

00:14:48,869 --> 00:14:46,929

quote from you i really like it i hope

380

00:14:51,059 --> 00:14:48,879

it's your quote the universe is cool

381

00:14:54,869 --> 00:14:51,069

enough without making up crap about it

382

00:14:57,179 --> 00:14:54,879

yeah that's me I say that a lot because

383

00:14:58,349 --> 00:14:57,189

honestly you know people make stuff up

384

00:14:59,579 --> 00:14:58,359

about the universe all the time because

385

00:15:01,889 --> 00:14:59,589

I think they want to make it more

386

00:15:03,389 --> 00:15:01,899

exciting but you don't need to once you

387

00:15:05,489 --> 00:15:03,399

learn about what's really out there and

388

00:15:08,369 --> 00:15:05,499

what's really going on there's enough

389

00:15:10,139 --> 00:15:08,379

Wonder and awe and majesty out there for

390

00:15:11,579 --> 00:15:10,149

anyone who play we're gonna see on the

391

00:15:13,590 --> 00:15:11,589

Discovery Channel just give us one thing

392

00:15:15,269 --> 00:15:13,600

we can investigate and take away and

393

00:15:16,619 --> 00:15:15,279

have a look up on the net or on some

394

00:15:18,029 --> 00:15:16,629

astronomy sites what's one thing we

395

00:15:19,529 --> 00:15:18,039

could have a look at this afternoon and

396

00:15:21,900 --> 00:15:19,539

get a bit of that wonder if you go to

397

00:15:23,340 --> 00:15:21,910

bad astronomy com which is my website

398

00:15:25,409 --> 00:15:23,350

that will take you to my blog which is

399

00:15:27,449 --> 00:15:25,419

being hosted by discover magazine I post

400

00:15:29,460 --> 00:15:27,459

pictures there all the time and describe

401
00:15:30,960 --> 00:15:29,470
the science behind them I just posted

402
00:15:32,729 --> 00:15:30,970
one of the Orion Nebula which is

403
00:15:34,739 --> 00:15:32,739
gorgeous another one of a nearby

404
00:15:36,749 --> 00:15:34,749
galaxies with galaxies that are much

405
00:15:38,549 --> 00:15:36,759
more distant in the background and I use

406
00:15:41,009 --> 00:15:38,559
that as an excuse to talk about how big

407
00:15:43,229 --> 00:15:41,019
the universe is but how big of a role we

408
00:15:44,639 --> 00:15:43,239
play in it I love doing that sort of

409
00:15:45,779 --> 00:15:44,649
thing and I think if you if you scroll

410
00:15:47,789 --> 00:15:45,789
through and look for some of the things

411
00:15:49,169 --> 00:15:47,799
I talk about there you'll find some

412
00:15:51,329 --> 00:15:49,179
things to interest you what do you think

413
00:15:53,609 --> 00:15:51,339

of the Drake Equation are any of those

414

00:15:55,710 --> 00:15:53,619

numbers even possible it was just such a

415

00:15:57,509 --> 00:15:55,720

wild guess it's just don't worry about

416

00:15:58,919 --> 00:15:57,519

it well actually the Drake Equation is a

417

00:16:00,869 --> 00:15:58,929

way of estimating how much life there is

418

00:16:03,629 --> 00:16:00,879

in the universe and it depends on things

419

00:16:04,979 --> 00:16:03,639

like how how often stars are formed how

420

00:16:06,960 --> 00:16:04,989

many of them have planets how many of

421

00:16:09,179 --> 00:16:06,970

those planets have life and ten years

422

00:16:10,919 --> 00:16:09,189

ago we really didn't know but now we've

423

00:16:13,379 --> 00:16:10,929

got several of those terms in the

424

00:16:15,299 --> 00:16:13,389

equation pretty well understood we now

425

00:16:16,559 --> 00:16:15,309

often stars are born in the galaxy and

426

00:16:18,569 --> 00:16:16,569

we're getting a good idea of how many of

427

00:16:20,639 --> 00:16:18,579

them have planets so we're able to start

428

00:16:22,859 --> 00:16:20,649

to nail this thing down a little bit but

429

00:16:25,259 --> 00:16:22,869

it's not supposed to give you a specific

430

00:16:27,359 --> 00:16:25,269

number it's not going to be six I talked

431

00:16:30,210 --> 00:16:27,369

about this in a second episode and there

432

00:16:31,949 --> 00:16:30,220

could be you know one or two alien

433

00:16:33,629 --> 00:16:31,959

civilizations in the galaxy or there

434

00:16:35,969 --> 00:16:33,639

could be thousands we don't really know

435

00:16:37,319 --> 00:16:35,979

but the more we study the stuff the more

436

00:16:38,879 --> 00:16:37,329

we find out the better we'll be able to

437

00:16:40,379 --> 00:16:38,889

nail that down new being on the cutting

438

00:16:42,329 --> 00:16:40,389

edge of science when you run up against

439

00:16:44,969 --> 00:16:42,339

someone who is into astrology or

440

00:16:46,799 --> 00:16:44,979

seriously believes in UFO what is the

441

00:16:48,809 --> 00:16:46,809

way that you try and change their mind

442

00:16:50,340 --> 00:16:48,819

well how do you approach it I've been a

443

00:16:52,169 --> 00:16:50,350

little forceful here and in this

444

00:16:53,819 --> 00:16:52,179

particular interview but I actually I'm

445

00:16:55,229 --> 00:16:53,829

very sympathetic to people who believe

446

00:16:55,830 --> 00:16:55,239

in things because I was that way when I

447

00:16:58,260 --> 00:16:55,840

was a kid

448

00:16:59,760 --> 00:16:58,270

I believed in UFOs and telepathy and all

449

00:17:01,500 --> 00:16:59,770

that sort of stuff and as the evidence

450

00:17:03,840 --> 00:17:01,510

became more overwhelming as I read more

451
00:17:05,880 --> 00:17:03,850
about it I realized that no this stuff

452
00:17:07,710 --> 00:17:05,890
doesn't exist so I try to be sympathetic

453
00:17:10,500 --> 00:17:07,720
when I'm talking to people i try to try

454
00:17:11,820 --> 00:17:10,510
to be nice and say you know well let's

455
00:17:13,020 --> 00:17:11,830
look at some of the evidence look let's

456
00:17:15,930 --> 00:17:13,030
look at some of the claims you're making

457
00:17:18,210 --> 00:17:15,940
and see if they if they work out and try

458
00:17:20,790 --> 00:17:18,220
to you know reach across to them and

459
00:17:22,170 --> 00:17:20,800
show them what what i think is really

460
00:17:23,880 --> 00:17:22,180
happening and doesn't always work and

461
00:17:25,740 --> 00:17:23,890
that's okay you can't convince everybody

462
00:17:26,940 --> 00:17:25,750
but hopefully a little by little you

463
00:17:28,440 --> 00:17:26,950

know if you can convince them of one

464

00:17:30,240 --> 00:17:28,450

little thing get your foot in the door

465

00:17:31,950 --> 00:17:30,250

there eventually they'll be able to

466

00:17:33,510 --> 00:17:31,960

apply that to other other aspects of

467

00:17:35,310 --> 00:17:33,520

their lives as well that's the best we

468

00:17:37,650 --> 00:17:35,320

can hope for now you are known as the

469

00:17:41,610 --> 00:17:37,660

singing astronomer and I've got the jaws

470

00:17:43,830 --> 00:17:41,620

Rob track that you feature on I don't

471

00:17:46,080 --> 00:17:43,840

actually sing for that song but I'm

472

00:17:47,340 --> 00:17:46,090

actually i narrate that song George Rob

473

00:17:49,500 --> 00:17:47,350

is a friend of mine he's a skeptic and

474

00:17:52,020 --> 00:17:49,510

he's a musician and he came out with his

475

00:17:53,550 --> 00:17:52,030

latest album called trebuchet and on it

476

00:17:55,410 --> 00:17:53,560

as a song called death from the skies

477

00:17:57,420 --> 00:17:55,420

and he plays the background music and

478

00:17:59,520 --> 00:17:57,430

has me reading statistics of the

479

00:18:02,040 --> 00:17:59,530

likelihood of a nearby supernova or a

480

00:18:03,330 --> 00:18:02,050

black hole passing by the earth and that

481

00:18:04,740 --> 00:18:03,340

was actually a lot of fun to do i'm

482

00:18:06,240 --> 00:18:04,750

hoping to take that on the road the

483

00:18:08,580 --> 00:18:06,250

lunge track isn't supposed to scare us

484

00:18:09,420 --> 00:18:08,590

it's just to open our eyes yeah and

485

00:18:10,890 --> 00:18:09,430

matter of fact it might even be

486

00:18:12,690 --> 00:18:10,900

reassuring because the odds are so low

487

00:18:14,250 --> 00:18:12,700

of these things happening gonna come to

488

00:18:16,230 --> 00:18:14,260

Australia going to look at a food crisis

489

00:18:21,430 --> 00:18:16,240

Oh what I love to come back I would come

490

00:18:21,440 --> 00:18:36,639

Oh

491

00:18:43,999 --> 00:18:40,809

odds of dying by Astra impact one in

492

00:18:47,019 --> 00:18:44,009

700,000 the overall risk of dying

493

00:18:49,639 --> 00:18:47,029

primitive act in your lifetime is one in

494

00:18:51,949 --> 00:18:49,649

700,000 somewhat less that's being

495

00:18:54,409 --> 00:18:51,959

killed by a fireworks accident but still

496

00:19:16,030 --> 00:18:54,419

more cruel than being killed on the mews

497

00:19:22,790 --> 00:19:19,070

odds of dying by supernovae explosion

498

00:19:24,500 --> 00:19:22,800

one in ten million supernovae happen

499

00:19:27,500 --> 00:19:24,510

about once per century in anything

500

00:19:30,800 --> 00:19:27,510

galaxy a soon event would cause a mass

501
00:19:32,990 --> 00:19:30,810
extinction nearly everyone hurry you

502
00:19:44,920 --> 00:19:33,000
specifically dying from one during your

503
00:19:51,250 --> 00:19:48,080
odds of dying by solar flare or coronal

504
00:19:53,840 --> 00:19:51,260
mass ejection zero but with an asterisk

505
00:19:55,520 --> 00:19:53,850
popping big solar event can seriously

506
00:19:58,370 --> 00:19:55,530
impair or destroy a nation's

507
00:20:01,910 --> 00:19:58,380
infrastructure and come into all it will

508
00:20:04,670 --> 00:20:01,920
not directly cause death we have to this

509
00:20:06,590 --> 00:20:04,680
zero chance for human fatality but with

510
00:20:17,920 --> 00:20:06,600
an extra Ska's a known to the

511
00:20:24,620 --> 00:20:20,990
odds of dying by gamma ray burst one in

512
00:20:27,050 --> 00:20:24,630
14 million gary bursts are dangerous for

513
00:20:29,390 --> 00:20:27,060

distances of more than 7,000 five years

514

00:20:31,820 --> 00:20:29,400

we have to be in a fan of a relatively

515

00:20:35,450 --> 00:20:31,830

narrow beam get hurt your odds of being

516

00:20:37,280 --> 00:20:35,460

killed by a grb or 114 million you are

517

00:20:47,470 --> 00:20:37,290

found a slightly be killed by a shark

518

00:20:47,480 --> 00:21:14,060

control as I've done by emphasizing

519

00:21:14,070 --> 00:21:37,200

the universe

520

00:21:37,210 --> 00:21:45,240

these are the ways the world will end

521

00:21:51,190 --> 00:21:48,070

this is desiree host of Canadian radio

522

00:21:53,169 --> 00:21:51,200

show skeptically speaking for those of

523

00:21:55,600 --> 00:21:53,179

you that don't know Kenneth is quite

524

00:21:57,970 --> 00:21:55,610

similar to Australia people know is

525

00:22:00,990 --> 00:21:57,980

primarily for our weather and our beer

526

00:22:04,990 --> 00:22:01,000

and we have a queen just like you do

527

00:22:07,299 --> 00:22:05,000

same one as you do actually we also have

528

00:22:09,640 --> 00:22:07,309

mythical monsters and people who think

529

00:22:11,110 --> 00:22:09,650

they have psychic abilities and people

530

00:22:14,049 --> 00:22:11,120

who think that vaccinations are bad for

531

00:22:16,149 --> 00:22:14,059

you so keep listening to the skeptic

532

00:22:23,969 --> 00:22:16,159

zone and know that we're all in this

533

00:22:27,999 --> 00:22:26,560

well i'm in that melbourne victoria

534

00:22:30,039 --> 00:22:28,009

visiting my good friend dr. steve

535

00:22:32,639 --> 00:22:30,049

roberts and steve has dragged me along

536

00:22:35,469 --> 00:22:32,649

quite willingly I must say to the famous

537

00:22:37,149 --> 00:22:35,479

Victoria Queen Victoria Martinez to lea

538

00:22:39,579 --> 00:22:37,159

market at top of it is of a street in

539

00:22:42,189 --> 00:22:39,589

Melbourne it's like a giant sheds or

540

00:22:43,989 --> 00:22:42,199

sheds i should say big tin roofs and

541

00:22:45,729 --> 00:22:43,999

they just stall out to store after store

542

00:22:48,310 --> 00:22:45,739

we're passing jeans at the moment

543

00:22:51,159 --> 00:22:48,320

there's some leather jackets ugg boots

544

00:22:53,639 --> 00:22:51,169

over there some some interesting clocks

545

00:22:57,099 --> 00:22:53,649

giant clocks here flags of all nations

546

00:23:00,159 --> 00:22:57,109

painting phone accessories number plates

547

00:23:02,139 --> 00:23:00,169

it goes on and on and on so I'm curious

548

00:23:03,489 --> 00:23:02,149

to see what we're going to find you can

549

00:23:05,619 --> 00:23:03,499

have your own number plate made up over

550

00:23:09,279 --> 00:23:05,629

here look at that you type it into the

551
00:23:11,529 --> 00:23:09,289
computer and away you go for fun Steve's

552
00:23:16,209 --> 00:23:11,539
toolshed little Viggo let's go feed your

553
00:23:17,829 --> 00:23:16,219
boobies yeah oh well let's let's dive

554
00:23:24,710 --> 00:23:17,839
into these markets and see what we can

555
00:23:29,940 --> 00:23:27,120
we've come across a remarkable little

556
00:23:31,470 --> 00:23:29,950
store here they're selling a device you

557
00:23:34,620 --> 00:23:31,480
put over your ear it's called the

558
00:23:37,440 --> 00:23:34,630
genuine Ozzy [h__h] protector ideal

559
00:23:39,960 --> 00:23:37,450
for use with politicians conspiracy

560
00:23:42,810 --> 00:23:39,970
theorists creationists nagging spouses

561
00:23:45,150 --> 00:23:42,820
used car salesman ex-girlfriend friends

562
00:23:47,400 --> 00:23:45,160
religious fanatics married men debtors

563
00:23:53,039 --> 00:23:47,410

tradesmen and many more and the website

564

00:23:56,210 --> 00:23:53,049

is www protected calm day you and your

565

00:23:59,159 --> 00:23:56,220

the lovely lady here at the stent

566

00:24:00,780 --> 00:23:59,169

selling this other stuff I i must admit

567

00:24:05,159 --> 00:24:00,790

that's a bitty pretty unusual thing to

568

00:24:08,010 --> 00:24:05,169

sell surprisingly very popular for

569

00:24:10,169 --> 00:24:08,020

people people by four at a time yeah

570

00:24:11,940 --> 00:24:10,179

head of a I've never seen anything like

571

00:24:13,320 --> 00:24:11,950

it it's really funny but you're also

572

00:24:15,150 --> 00:24:13,330

selling all sorts of wonderful other

573

00:24:16,860 --> 00:24:15,160

things like this is for getting rid of

574

00:24:18,870 --> 00:24:16,870

pet hairs is it yeah and bubbles off

575

00:24:21,570 --> 00:24:18,880

your clothes and ironing board covers

576

00:24:22,980 --> 00:24:21,580

everything and my friend I Steve Roberts

577

00:24:24,240 --> 00:24:22,990

is here she was just telling me that the

578

00:24:26,010 --> 00:24:24,250

the bull should protect his cell

579

00:24:27,360 --> 00:24:26,020

remarkably well Steve I shall think so

580

00:24:30,570 --> 00:24:27,370

as you can saw need for that kind of

581

00:24:32,010 --> 00:24:30,580

money someday maybe rush to the big

582

00:24:33,570 --> 00:24:32,020

marketing getting [h__h] protector

583

00:24:36,480 --> 00:24:33,580

just what you need this what I hope they

584

00:24:39,270 --> 00:24:36,490

come in pairs under each here that reach

585

00:24:45,020 --> 00:24:39,280

in very handy oh thank you very much

586

00:24:51,540 --> 00:24:47,520

Steve I wanted to have a quick word

587

00:24:54,060 --> 00:24:51,550

about your quiz dr. Bob's online quiz

588

00:24:57,090 --> 00:24:54,070

now this is a quiz specifically for

589

00:24:58,680 --> 00:24:57,100

skeptics well can you say that not for

590

00:25:02,370 --> 00:24:58,690

anybody who's the light heart of the

591

00:25:03,630 --> 00:25:02,380

likes of sense of fun right and what

592

00:25:05,340 --> 00:25:03,640

sort of questions you posed in New

593

00:25:07,740 --> 00:25:05,350

Orleans look I guess Phillip was setting

594

00:25:10,140 --> 00:25:07,750

an exam like you nosy earth young or old

595

00:25:13,260 --> 00:25:10,150

and if you say it's young you go all bad

596

00:25:15,180 --> 00:25:13,270

bad no point bad bad or if you say it's

597

00:25:17,880 --> 00:25:15,190

very old you yes very good one point

598

00:25:19,200 --> 00:25:17,890

Dean you know what so what so what I

599

00:25:21,150 --> 00:25:19,210

wanted to do is to ask questions that

600

00:25:24,419 --> 00:25:21,160

are extremely difficult yes you do have

601
00:25:27,240 --> 00:25:24,429
an answer but really I don't oppose as

602
00:25:30,270 --> 00:25:27,250
being a smartass so I just like to see

603
00:25:31,880 --> 00:25:30,280
Wheaton rip RT and a witty answer so the

604
00:25:34,080 --> 00:25:31,890
winner of your quiz each month is not

605
00:25:35,970 --> 00:25:34,090
necessarily who gets it right oh nice

606
00:25:40,140 --> 00:25:35,980
who gets the best answers regardless oh

607
00:25:43,049 --> 00:25:40,150
yeah well I already know the answer so

608
00:25:45,720 --> 00:25:43,059
it be some sunny sunny can put something

609
00:25:49,500 --> 00:25:45,730
witty you know um for example on the

610
00:25:51,690 --> 00:25:49,510
world land speed record in 1899 65 miles

611
00:25:53,910 --> 00:25:51,700
an hour what powered the vehicle that

612
00:25:55,860 --> 00:25:53,920
took his record yeah okay it was

613
00:25:58,310 --> 00:25:55,870

actually steam-powered and also

614

00:26:02,270 --> 00:25:58,320

electricity powered one in the same year

615

00:26:05,760 --> 00:26:02,280

but if somebody replied vanity or

616

00:26:08,970 --> 00:26:05,770

testosterone and it's not even really

617

00:26:11,490 --> 00:26:08,980

more accurately the real answer how was

618

00:26:14,640 --> 00:26:11,500

the sound of music edited for showing in

619

00:26:18,840 --> 00:26:14,650

South Korea I wasn't they cuddle the

620

00:26:20,790 --> 00:26:18,850

songs out it's too long there's are sort

621

00:26:22,560 --> 00:26:20,800

of things you like the Bob's quit the

622

00:26:26,190 --> 00:26:22,570

answer I got was on it is a

623

00:26:30,000 --> 00:26:26,200

insufficiently it is a with duct tape

624

00:26:32,010 --> 00:26:30,010

and a flamethrower North Korea so it

625

00:26:33,390 --> 00:26:32,020

really just people who send some fun and

626

00:26:35,190 --> 00:26:33,400

I published all the answers I get all

627

00:26:37,080 --> 00:26:35,200

the ones on the printable yeah up or

628

00:26:38,460 --> 00:26:37,090

down for interval yeah there's no prize

629

00:26:40,620 --> 00:26:38,470

when you see if it gives it just a sense

630

00:26:42,360 --> 00:26:40,630

of fun and very difficult questions and

631

00:26:43,980 --> 00:26:42,370

you can also see all the previous

632

00:26:46,020 --> 00:26:43,990

questions and all the previous answers

633

00:26:48,290 --> 00:26:46,030

and the winner gets their name put on

634

00:26:50,270 --> 00:26:48,300

your bored of your role of Honor my

635

00:26:52,460 --> 00:26:50,280

Olive on other sites and we could send a

636

00:26:54,050 --> 00:26:52,470

great skeptic CD or something so there

637

00:26:57,110 --> 00:26:54,060

are prizes occasionally look check out

638

00:27:00,830 --> 00:26:57,120

dr. Bob's skeptical or not so skeptical

639

00:27:04,010 --> 00:27:00,840

quiz and that's a ww skeptics calm day

640

00:27:06,560 --> 00:27:04,020

you / features and there you'll find dr.

641

00:27:08,060 --> 00:27:06,570

Bob's quiz that's right yeah I think I

642

00:27:10,280 --> 00:27:08,070

happy to engage in correspondence for

643

00:27:11,990 --> 00:27:10,290

people to send answers in as well so see

644

00:27:20,510 --> 00:27:12,000

if we can stamp dr. Bob thanks Steve

645

00:27:24,080 --> 00:27:20,520

thank you one of the things that

646

00:27:26,210 --> 00:27:24,090

interest me being here with the hundreds

647

00:27:28,490 --> 00:27:26,220

of little stalls are there are some

648

00:27:33,680 --> 00:27:28,500

selling what can only assume a Power

649

00:27:37,430 --> 00:27:33,690

Balance ripoffs the packaging is vastly

650

00:27:40,700 --> 00:27:37,440

inferior looks like photocopy paper

651
00:27:42,710 --> 00:27:40,710
almost but you know the power balance

652
00:27:45,200 --> 00:27:42,720
bands observe looks just as genuine is

653
00:27:47,270 --> 00:27:45,210
the so-called real item but they range

654
00:27:49,040 --> 00:27:47,280
anywhere from ten dollars back there for

655
00:27:51,950 --> 00:27:49,050
purple one to forty dollars around in

656
00:27:54,140 --> 00:27:51,960
another store so I guess some people

657
00:27:57,380 --> 00:27:54,150
here has simply bought consignments of

658
00:27:59,660 --> 00:27:57,390
them from somewhere and flogging them

659
00:28:02,870 --> 00:27:59,670
off here at the Victoria markets very

660
00:28:06,110 --> 00:28:02,880
interesting so there we pop silver flip

661
00:28:16,240 --> 00:28:06,120
off I say ripoffs of shonky device to

662
00:28:20,590 --> 00:28:18,040
what a great time it's been here just

663
00:28:22,690 --> 00:28:20,600

looking around the amazing stories of

664

00:28:25,680 --> 00:28:22,700

Victoria markets I also almost sound

665

00:28:28,000 --> 00:28:25,690

like I've been paid by the by the

666

00:28:30,910 --> 00:28:28,010

management here to spruik this place but

667

00:28:32,380 --> 00:28:30,920

it really is a fantastic morning to

668

00:28:35,350 --> 00:28:32,390

browse these shops because you'll never

669

00:28:37,000 --> 00:28:35,360

know what you'll find Steve Roberts is

670

00:28:39,580 --> 00:28:37,010

walking away with bag loads of goodies

671

00:28:41,380 --> 00:28:39,590

yeah you like all these souvenirs I

672

00:28:46,060 --> 00:28:41,390

didn't think I'd need I could spare

673

00:28:48,820 --> 00:28:46,070

Timmy levitus panel and a web camera for

674

00:28:51,490 --> 00:28:48,830

the computer and my auntie [h__h]

675

00:28:52,660 --> 00:28:51,500

stickers of course a very handy all

676

00:28:55,210 --> 00:28:52,670

sorts of stuff I never really knew I

677

00:28:58,240 --> 00:28:55,220

need it but I've got it now well I think

678

00:29:00,580 --> 00:28:58,250

it's the universal truth is you don't

679

00:29:02,860 --> 00:29:00,590

really see things in your own city until

680

00:29:04,300 --> 00:29:02,870

somebody comes to visit and they say

681

00:29:08,380 --> 00:29:04,310

let's go out and do this so let's get

682

00:29:10,840 --> 00:29:08,390

into that obvious oh yeah and have to be

683

00:29:14,350 --> 00:29:10,850

open to there's all sorts of stalls here

684

00:29:16,510 --> 00:29:14,360

mechanical and clothes and food and Lulu

685

00:29:19,140 --> 00:29:16,520

stuff and uniting it's all here of

686

00:29:24,130 --> 00:29:19,150

course we passed a little stall of a

687

00:29:26,230 --> 00:29:24,140

psychic tarot card reader and where they

688

00:29:27,790 --> 00:29:26,240

sense things from touching the object so

689

00:29:30,460 --> 00:29:27,800

I comment psychometry the word escape

690

00:29:32,050 --> 00:29:30,470

from psychometry that's right so yet

691

00:29:33,550 --> 00:29:32,060

Melbourne people if you haven't been to

692

00:29:35,200 --> 00:29:33,560

your Victorian markets in a while now is

693

00:29:37,020 --> 00:29:35,210

the time to do it and if you're visiting

694

00:29:49,870 --> 00:29:37,030

Melbourne I can thoroughly recommend

695

00:29:56,210 --> 00:29:54,020

so that's why you can't eat her I was

696

00:29:57,140 --> 00:29:56,220

just talking to the students here and

697

00:30:00,050 --> 00:29:57,150

look I'm supposed to tell you about

698

00:30:03,770 --> 00:30:00,060

something the cosmic tea party I new

699

00:30:05,150 --> 00:30:03,780

science podcast podcast hey who's it at

700

00:30:07,880 --> 00:30:05,160

any rate it's about science and

701
00:30:11,240 --> 00:30:07,890
mathematics sounds rather dull oh hang

702
00:30:12,860 --> 00:30:11,250
on hang on it and says here not done so

703
00:30:16,580 --> 00:30:12,870
there you have it the cosmic tea party

704
00:30:23,510 --> 00:30:16,590
podcast www cosmic Tea Party or or

705
00:30:26,480 --> 00:30:23,520
search for them one I choose now it's

706
00:30:32,180 --> 00:30:26,490
time for dr. Rachel reports with dr.

707
00:30:33,920 --> 00:30:32,190
Rachel Dunlop final part of a British

708
00:30:36,380 --> 00:30:33,930
Medical Journal investigation has been

709
00:30:37,910 --> 00:30:36,390
published debunking research by andrew

710
00:30:40,610 --> 00:30:37,920
wakefield which claimed a link between

711
00:30:42,920 --> 00:30:40,620
autism and the MMR vaccine given to

712
00:30:45,350 --> 00:30:42,930
children the journal denounces the study

713
00:30:47,300 --> 00:30:45,360

as an elaborate fraud but Wakefield says

714

00:30:49,880 --> 00:30:47,310

it's trying to crush valid probes into

715

00:30:51,500 --> 00:30:49,890

immunization Wakefield's research led

716

00:30:53,180 --> 00:30:51,510

many parents to stop vaccinating their

717

00:30:55,120 --> 00:30:53,190

children and is still cited by

718

00:30:57,230 --> 00:30:55,130

anti-vaccination groups around the world

719

00:30:59,240 --> 00:30:57,240

dr. rachel Dunlop is a research

720

00:31:00,650 --> 00:30:59,250

scientist and a member of the Australian

721

00:31:03,320 --> 00:31:00,660

skeptics she has written extensively

722

00:31:04,670 --> 00:31:03,330

about the Wakefield case on her blog and

723

00:31:06,140 --> 00:31:04,680

she joins us now Rachel thanks for

724

00:31:08,300 --> 00:31:06,150

coming on the drum thanks for having mr.

725

00:31:09,890 --> 00:31:08,310

now let's go back to the case of andrew

726

00:31:11,540 --> 00:31:09,900

wakefield what did he do when did it

727

00:31:13,520 --> 00:31:11,550

when did this all start before we get

728

00:31:15,620 --> 00:31:13,530

into the medical journal publications

729

00:31:17,780 --> 00:31:15,630

tell us a bit more about Wakefield sure

730

00:31:20,860 --> 00:31:17,790

well the paper was published in 1998 in

731

00:31:23,660 --> 00:31:20,870

The Lancet and it covered 12 children

732

00:31:25,850 --> 00:31:23,670

who Wakefield was trying to demonstrate

733

00:31:28,280 --> 00:31:25,860

this new disorder called autistic

734

00:31:31,010 --> 00:31:28,290

colitis which is a disease of the

735

00:31:33,290 --> 00:31:31,020

gastrointestinal tract and so he did

736

00:31:35,990 --> 00:31:33,300

this study looking at these 12 children

737

00:31:37,670 --> 00:31:36,000

and then what happened was in fact in

738

00:31:40,520 --> 00:31:37,680

the study it didn't look at a link

739

00:31:42,260 --> 00:31:40,530

between autism and vaccination but he

740

00:31:44,840 --> 00:31:42,270

had a subsequent press conference after

741

00:31:47,540 --> 00:31:44,850

the study was released and this is where

742

00:31:50,600 --> 00:31:47,550

the whole sort of vaccines and MMR cause

743

00:31:52,640 --> 00:31:50,610

autism began and it sort of got taken on

744

00:31:54,830 --> 00:31:52,650

by the media particularly in the UK and

745

00:31:57,170 --> 00:31:54,840

spread across the world and it created

746

00:31:58,850 --> 00:31:57,180

this vaccine scare which we

747

00:32:01,190 --> 00:31:58,860

today which is that many parents think

748

00:32:03,340 --> 00:32:01,200

for vaccines so what direct influence to

749

00:32:06,250 --> 00:32:03,350

Wakefield have on childhood vaccinations

750

00:32:08,330 --> 00:32:06,260

uh well vaccination rates dropped

751
00:32:10,880 --> 00:32:08,340
particularly the MMR which is the

752
00:32:13,730 --> 00:32:10,890
measles mumps rubella vaccine in in the

753
00:32:15,650 --> 00:32:13,740
UK for example after his study was

754
00:32:18,500 --> 00:32:15,660
released levels dropped to about

755
00:32:20,690 --> 00:32:18,510
seventy-nine percent now it's required

756
00:32:22,280 --> 00:32:20,700
about ninety two percent of people have

757
00:32:24,500 --> 00:32:22,290
to be vaccinated to have this some

758
00:32:26,810 --> 00:32:24,510
process called herd immunity and

759
00:32:28,100 --> 00:32:26,820
basically that means that if a lot of

760
00:32:30,650 --> 00:32:28,110
people in the community are vaccinated

761
00:32:33,920 --> 00:32:30,660
then when we get viruses or bacteria

762
00:32:35,690 --> 00:32:33,930
into the community they can't spread and

763
00:32:37,460 --> 00:32:35,700

in some parts of London in fact our

764

00:32:40,460 --> 00:32:37,470

vaccination levels drop to as low as

765

00:32:41,720 --> 00:32:40,470

fifty percent so what what what impact

766

00:32:43,880 --> 00:32:41,730

did that have on these kind of diseases

767

00:32:45,560 --> 00:32:43,890

coming back in well it had an impact on

768

00:32:47,690 --> 00:32:45,570

measles coming back in the UK in

769

00:32:49,520 --> 00:32:47,700

particular and children getting stick in

770

00:32:52,640 --> 00:32:49,530

some children tragically dying as a

771

00:32:54,560 --> 00:32:52,650

result so yeah he had a big impact on

772

00:32:56,120 --> 00:32:54,570

the levels of vaccination rates after he

773

00:32:57,590 --> 00:32:56,130

released his paper well let's deal with

774

00:32:59,270 --> 00:32:57,600

the three part series that the British

775

00:33:00,980 --> 00:32:59,280

Medical Journal has just released and

776

00:33:04,640 --> 00:33:00,990

the last version of that has just been

777

00:33:06,740 --> 00:33:04,650

published now they say that Wakefield is

778

00:33:08,360 --> 00:33:06,750

guilty of an elaborate fraud now that's

779

00:33:10,400 --> 00:33:08,370

just not you know making mistakes

780

00:33:11,840 --> 00:33:10,410

elaborate fraud is very strong language

781

00:33:15,110 --> 00:33:11,850

why are they using that kind of language

782

00:33:18,350 --> 00:33:15,120

yeah well I guess before this these

783

00:33:20,270 --> 00:33:18,360

three publications were put out by the

784

00:33:22,880 --> 00:33:20,280

bmj which was in the last week and a

785

00:33:25,070 --> 00:33:22,890

half we thought that perhaps it was bad

786

00:33:27,530 --> 00:33:25,080

science whereby perhaps Wakefield had

787

00:33:29,930 --> 00:33:27,540

massaged the statistics a little bit or

788

00:33:31,880 --> 00:33:29,940

misinterpreted the data a little bit but

789

00:33:33,380 --> 00:33:31,890

the research that Bryan dear did and

790

00:33:35,420 --> 00:33:33,390

he's an investigative journalist who

791

00:33:37,760 --> 00:33:35,430

published this these three things in the

792

00:33:39,950 --> 00:33:37,770

bmj he spent seven years researching

793

00:33:43,610 --> 00:33:39,960

this case and he was able to show that

794

00:33:45,370 --> 00:33:43,620

in fact Wakefield made up clinical

795

00:33:47,510 --> 00:33:45,380

records of the children in the study

796

00:33:49,520 --> 00:33:47,520

those 12 children that you mentioned

797

00:33:51,260 --> 00:33:49,530

before that's correct so the 12 children

798

00:33:52,820 --> 00:33:51,270

in that study when deer went back and

799

00:33:54,770 --> 00:33:52,830

checked the records at the hospital

800

00:33:58,220 --> 00:33:54,780

where they originally came and were

801
00:33:59,390 --> 00:33:58,230
diagnosed or tested on didn't match the

802
00:34:02,480 --> 00:33:59,400
information that was in the paper

803
00:34:05,060 --> 00:34:02,490
whatsoever it turned out also that most

804
00:34:06,920 --> 00:34:05,070
of the children that Wakefield said were

805
00:34:08,829 --> 00:34:06,930
autistic that he studied in this paper

806
00:34:10,389 --> 00:34:08,839
weren't autistic

807
00:34:11,680 --> 00:34:10,399
it turned out that some of the studies

808
00:34:13,389 --> 00:34:11,690
that he did he did some pathology

809
00:34:15,519 --> 00:34:13,399
studies where he took tissue from the

810
00:34:18,099 --> 00:34:15,529
kids collins to look for increased

811
00:34:19,959 --> 00:34:18,109
levels of measles virus those slides

812
00:34:22,599 --> 00:34:19,969
could never be found so that data

813
00:34:24,039 --> 00:34:22,609

couldn't be reproduced and of course

814

00:34:26,229 --> 00:34:24,049

there's always something behind this

815

00:34:28,329 --> 00:34:26,239

stuff Steven that's you know he was you

816

00:34:29,829 --> 00:34:28,339

know for money basically so tell us what

817

00:34:31,869 --> 00:34:29,839

tell us about that tell us what the

818

00:34:34,899 --> 00:34:31,879

Bryant dear the journalist found out

819

00:34:38,019 --> 00:34:34,909

about Wakefield's financial incentive to

820

00:34:39,999 --> 00:34:38,029

why what he did well I mean I'm a

821

00:34:41,709 --> 00:34:40,009

research scientist myself and when I

822

00:34:43,269 --> 00:34:41,719

read this stuff last week I didn't think

823

00:34:45,940 --> 00:34:43,279

it could be as bad as it is it's really

824

00:34:49,450 --> 00:34:45,950

really bad I mean we knew that Wakefield

825

00:34:51,129 --> 00:34:49,460

was employed by a lawyer back in 1998

826

00:34:53,709 --> 00:34:51,139

and he was putting this lawyer was

827

00:34:55,599 --> 00:34:53,719

putting together a case to show that the

828

00:34:58,479 --> 00:34:55,609

MMR vaccine was dangerous and so

829

00:35:01,209 --> 00:34:58,489

Wakefield was being paid 150 quid an

830

00:35:03,339 --> 00:35:01,219

hour by these lawyers as an expert and

831

00:35:05,950 --> 00:35:03,349

didn't he end up getting over 400,000

832

00:35:08,499 --> 00:35:05,960

British pounds for you yeah and I do too

833

00:35:10,420 --> 00:35:08,509

conversion today and that comes to 696

834

00:35:13,299 --> 00:35:10,430

thousand australian dollars so it's not

835

00:35:15,519 --> 00:35:13,309

small bicky's in addition to that he had

836

00:35:17,920 --> 00:35:15,529

a patent when he'd submitted for a

837

00:35:19,620 --> 00:35:17,930

measles vaccine because what he was

838

00:35:22,150 --> 00:35:19,630

trying to show is that the triple

839

00:35:24,069 --> 00:35:22,160

injection was dangerous so if he could

840

00:35:25,779 --> 00:35:24,079

show that through this paper and he had

841

00:35:27,219 --> 00:35:25,789

a patent on a singles measles vaccine

842

00:35:28,959 --> 00:35:27,229

that he could say but I've got the

843

00:35:32,200 --> 00:35:28,969

solution over here here is the single

844

00:35:33,459 --> 00:35:32,210

one by mine but in fact that's a you

845

00:35:35,469 --> 00:35:33,469

know we're talking about a million

846

00:35:37,299 --> 00:35:35,479

dollars st but it's much much worse than

847

00:35:39,309 --> 00:35:37,309

that and what dear was able to find

848

00:35:42,069 --> 00:35:39,319

which is what he published last week was

849

00:35:45,249 --> 00:35:42,079

that also Wakefield had plans he had a

850

00:35:48,279 --> 00:35:45,259

business plan to develop a test to look

851

00:35:50,709 --> 00:35:48,289

for this disorder in children that his

852

00:35:53,709 --> 00:35:50,719

test was potentially going to be making

853

00:35:56,920 --> 00:35:53,719

his company about 72 million pounds a

854

00:35:58,930 --> 00:35:56,930

year that is no we're not talking small

855

00:36:01,049 --> 00:35:58,940

B he's here okay well Anderson Cooper

856

00:36:03,880 --> 00:36:01,059

did an interview with andrew wakefield

857

00:36:06,219 --> 00:36:03,890

recently on CNN and here is what Andrew

858

00:36:08,499 --> 00:36:06,229

Wakefield said in defense of himself

859

00:36:09,789 --> 00:36:08,509

after this the first our first couple of

860

00:36:12,489 --> 00:36:09,799

the articles were published by the

861

00:36:14,620 --> 00:36:12,499

British Medical Journal cheers is a

862

00:36:17,650 --> 00:36:14,630

ruthless pragmatic attempt to crush any

863

00:36:19,779 --> 00:36:17,660

investigation into valid vaccine safety

864

00:36:22,120 --> 00:36:19,789

concerns not just my concerns i'm here

865

00:36:24,069 --> 00:36:22,130

at a meeting of experts on vaccines but

866

00:36:25,660 --> 00:36:24,079

around the world who are extremely

867

00:36:28,059 --> 00:36:25,670

concerned about the safety of vaccines

868

00:36:30,460 --> 00:36:28,069

and the barrage but they believe and i

869

00:36:32,190 --> 00:36:30,470

believe is being done to children so

870

00:36:34,269 --> 00:36:32,200

Wakefield there is trying to say that

871

00:36:36,460 --> 00:36:34,279

the journal the British Medical Journal

872

00:36:38,109 --> 00:36:36,470

is trying to crush valid investigations

873

00:36:41,079 --> 00:36:38,119

into vaccines he also said in that

874

00:36:42,789 --> 00:36:41,089

interview that the journalist brian dia

875

00:36:45,819 --> 00:36:42,799

is a hit man he described it as a hit

876
00:36:47,980 --> 00:36:45,829
man yeah well I think I mean Wakefield

877
00:36:49,990 --> 00:36:47,990
saying that this is an attempt to quash

878
00:36:52,660 --> 00:36:50,000
valid research into vaccines is

879
00:36:54,519 --> 00:36:52,670
absolutely false um for 13 years now

880
00:36:56,380 --> 00:36:54,529
science has been concentrating on trying

881
00:36:58,569 --> 00:36:56,390
to find this link between vaccines and

882
00:37:01,450 --> 00:36:58,579
autism because Wakefield published this

883
00:37:03,460 --> 00:37:01,460
in 1998 so 13 years of science have been

884
00:37:04,990 --> 00:37:03,470
spent looking into this link lots and

885
00:37:07,120 --> 00:37:05,000
lots of studies have been done and has

886
00:37:09,039 --> 00:37:07,130
there's been no evidence found Steve so

887
00:37:12,099 --> 00:37:09,049
in fact we've diverted our attention

888
00:37:15,309 --> 00:37:12,109

from looking at the causes of autism

889

00:37:18,160 --> 00:37:15,319

into debunking what Wakefield did okay i

890

00:37:19,480 --> 00:37:18,170

want to ask this question in relation to

891

00:37:21,730 --> 00:37:19,490

that because the Australian vaccination

892

00:37:23,109 --> 00:37:21,740

networker anti-vaccination organization

893

00:37:25,089 --> 00:37:23,119

they have a website on their website

894

00:37:27,130 --> 00:37:25,099

they refer to Wakefield in the British

895

00:37:28,480 --> 00:37:27,140

medical journal articles and they say

896

00:37:30,910 --> 00:37:28,490

that Wakefield's results have been

897

00:37:32,319 --> 00:37:30,920

verified and re-evaluated many times in

898

00:37:34,509 --> 00:37:32,329

the years since that first study was

899

00:37:36,099 --> 00:37:34,519

published in 1998 yeah this is something

900

00:37:37,569 --> 00:37:36,109

Wakefield says as well he says that

901
00:37:39,819 --> 00:37:37,579
there have been five studies done

902
00:37:42,279 --> 00:37:39,829
internationally that repeated or

903
00:37:45,160 --> 00:37:42,289
reproduced his work one of those studies

904
00:37:47,230 --> 00:37:45,170
was done by a white one of Wakefield's

905
00:37:49,690 --> 00:37:47,240
colleagues and published in a journal on

906
00:37:52,180 --> 00:37:49,700
which Wakefield was an editor so there's

907
00:37:53,680 --> 00:37:52,190
a big conflict of interest air as to

908
00:37:56,049 --> 00:37:53,690
whether or not you know that's a valid

909
00:37:57,099 --> 00:37:56,059
study one of them was an abstract which

910
00:37:59,529 --> 00:37:57,109
means it was presented at a conference

911
00:38:01,450 --> 00:37:59,539
but never published a couple of them

912
00:38:05,049 --> 00:38:01,460
were case studies on one or two people

913
00:38:06,789 --> 00:38:05,059

and one of them did a reasonable study

914

00:38:07,870 --> 00:38:06,799

and showed that there was no link so I'm

915

00:38:10,150 --> 00:38:07,880

not quite sure where they get that

916

00:38:11,920 --> 00:38:10,160

information okay the ABN also say once

917

00:38:14,589 --> 00:38:11,930

again the media in response to these

918

00:38:15,819 --> 00:38:14,599

these bmj articles once again the media

919

00:38:17,829 --> 00:38:15,829

is marching to the tune of their

920

00:38:19,779 --> 00:38:17,839

advertisers and goose stepping across

921

00:38:23,380 --> 00:38:19,789

the truth without any regard to what

922

00:38:24,490 --> 00:38:23,390

actually happened well if you look at

923

00:38:27,029 --> 00:38:24,500

what the studies that have been done

924

00:38:30,269 --> 00:38:27,039

since wakeful published The Lancet paper

925

00:38:33,370 --> 00:38:30,279

for example there was a study done in

926

00:38:35,290 --> 00:38:33,380

Denmark that looked at about 500,000

927

00:38:37,360 --> 00:38:35,300

children and looked

928

00:38:39,970 --> 00:38:37,370

vaccinated versus unvaccinated and found

929

00:38:41,620 --> 00:38:39,980

there was no increase in MMR in Japan

930

00:38:44,290 --> 00:38:41,630

they stopped using the MMR for a long

931

00:38:47,770 --> 00:38:44,300

time and the rates of autism continue to

932

00:38:49,660 --> 00:38:47,780

increase some of the components of

933

00:38:51,580 --> 00:38:49,670

vaccines that people like the avian

934

00:38:55,090 --> 00:38:51,590

claim cause autism were taken out of

935

00:38:57,730 --> 00:38:55,100

vaccines in the year 2000 2001 but MMR

936

00:38:59,830 --> 00:38:57,740

sorry autism rates continue to go up so

937

00:39:01,450 --> 00:38:59,840

it's clear that there's nothing to do

938

00:39:04,420 --> 00:39:01,460

with the vaccination timbira you got a

939

00:39:06,850 --> 00:39:04,430

question or a comment I guess I'm panic

940

00:39:08,440 --> 00:39:06,860

just anecdotal he's a doctor I didn't

941

00:39:11,350 --> 00:39:08,450

certainly working in Sydney or out of

942

00:39:12,580 --> 00:39:11,360

Sydney thankfully as large as this was

943

00:39:15,610 --> 00:39:12,590

in Britain I didn't get the impression

944

00:39:17,560 --> 00:39:15,620

that had kind of spread to any lengths

945

00:39:18,850 --> 00:39:17,570

at least in metropolitan Sydney I know

946

00:39:20,380 --> 00:39:18,860

there are certainly sections of

947

00:39:23,170 --> 00:39:20,390

Australia but I would be curious to know

948

00:39:25,900 --> 00:39:23,180

about statistics was there any drop in

949

00:39:27,700 --> 00:39:25,910

vaccination rates in Australia not

950

00:39:29,710 --> 00:39:27,710

really it didn't affect Australia as

951
00:39:31,240 --> 00:39:29,720
much as it did the UK I mean we only

952
00:39:33,100 --> 00:39:31,250
have about two or three percent of

953
00:39:34,420 --> 00:39:33,110
parents in this country that refused to

954
00:39:37,840 --> 00:39:34,430
vaccinate all together it's quite a

955
00:39:40,210 --> 00:39:37,850
small number it hasn't changed much so

956
00:39:42,460 --> 00:39:40,220
it really was a big problem much more in

957
00:39:45,970 --> 00:39:42,470
the United States and also in the UK I

958
00:39:48,880 --> 00:39:45,980
mean my my I guess comment on this is a

959
00:39:50,770 --> 00:39:48,890
couple of things one I think there is a

960
00:39:53,290 --> 00:39:50,780
segment of the community generally that

961
00:39:56,380 --> 00:39:53,300
would be suspicious of science modern

962
00:39:58,060 --> 00:39:56,390
medicine etc would look to hence the

963
00:39:59,470 --> 00:39:58,070

rise in alternative medicine secular

964

00:40:00,640 --> 00:39:59,480

spiritualities so this sort of

965

00:40:03,610 --> 00:40:00,650

information would be particularly

966

00:40:07,150 --> 00:40:03,620

attractive to that group second it kept

967

00:40:09,310 --> 00:40:07,160

this these sort of events it demeans the

968

00:40:11,470 --> 00:40:09,320

quality of science to the public who

969

00:40:13,120 --> 00:40:11,480

already have a very poor understanding

970

00:40:14,410 --> 00:40:13,130

of science and you know climate change

971

00:40:17,080 --> 00:40:14,420

is a great example so increasingly

972

00:40:19,630 --> 00:40:17,090

people will question just the validity

973

00:40:23,440 --> 00:40:19,640

of trials in general so I think it's

974

00:40:25,450 --> 00:40:23,450

very damaging this caper for scientific

975

00:40:27,700 --> 00:40:25,460

discourse in in the in the public realm

976
00:40:30,520 --> 00:40:27,710
Carey I've just got a comment and that

977
00:40:33,550 --> 00:40:30,530
is as the mother of a child who was

978
00:40:37,060 --> 00:40:33,560
vector vaccinated but who still got

979
00:40:39,670 --> 00:40:37,070
measles my only comment is that the

980
00:40:41,740 --> 00:40:39,680
doctors said to me see how sick she is

981
00:40:43,150 --> 00:40:41,750
can you imagine how much sicker she

982
00:40:45,310 --> 00:40:43,160
would have been if she hadn't been

983
00:40:47,500 --> 00:40:45,320
vaccinated so I actually don't

984
00:40:48,640 --> 00:40:47,510
understand why anyone wouldn't vaccinate

985
00:40:50,109 --> 00:40:48,650
their children

986
00:40:52,480 --> 00:40:50,119
I just think it's one of these things

987
00:40:54,970 --> 00:40:52,490
which we are as parents we should all be

988
00:40:57,069 --> 00:40:54,980

doing and I really I mean I think you

989

00:40:59,440 --> 00:40:57,079

know the fact that kids who get measles

990

00:41:01,599 --> 00:40:59,450

get as sick as okay as they do and they

991

00:41:03,309 --> 00:41:01,609

can die hmm I just think it's an

992

00:41:04,779 --> 00:41:03,319

obligation on every responsible parent

993

00:41:06,279 --> 00:41:04,789

to vaccinate their kids and I don't know

994

00:41:07,960 --> 00:41:06,289

anything about the sides I just know how

995

00:41:10,000 --> 00:41:07,970

six Lisa was in the history of health

996

00:41:11,620 --> 00:41:10,010

care clean water and vaccinations are

997

00:41:23,769 --> 00:41:11,630

probably to the biggest things that have

998

00:41:26,620 --> 00:41:23,779

save lives this is brian dunning from

999

00:41:30,240 --> 00:41:26,630

the sceptile cast been enjoying your

1000

00:41:33,339 --> 00:41:30,250

critical thinking shows in audio only

1001
00:41:37,140 --> 00:41:33,349
you've been missing half the fun check

1002
00:41:41,789 --> 00:41:37,150
out my new video podcast in fact on

1003
00:41:45,279 --> 00:41:41,799
itunes or click it on skep tied com3

1004
00:41:47,589 --> 00:41:45,289
pilot episodes of in fact are available

1005
00:41:49,359 --> 00:41:47,599
now for immediate viewing I'm looking

1006
00:41:51,579 --> 00:41:49,369
for sponsorship to produce an entire

1007
00:41:54,160 --> 00:41:51,589
first season of 13 episodes and

1008
00:41:56,799 --> 00:41:54,170
hopefully many more seasons to follow

1009
00:41:58,599 --> 00:41:56,809
you can see the whole lineup and get all

1010
00:42:02,370 --> 00:41:58,609
the other nuts and bolts if you go to

1011
00:42:05,200 --> 00:42:02,380
skep tide come and click on in fact and

1012
00:42:08,470 --> 00:42:05,210
don't forget to come back to the skeptic

1013
00:42:11,799 --> 00:42:08,480

zone when you're done watching I I think

1014

00:42:14,289 --> 00:42:11,809

it's audio only but that's okay I still

1015

00:42:20,650 --> 00:42:14,299

like it this is brian dunning from

1016

00:42:29,600 --> 00:42:20,660

sceptile calm join us now for drinking

1017

00:42:35,550 --> 00:42:33,480

and that clinking folks you can hear in

1018

00:42:37,320 --> 00:42:35,560

the best stop it stick the clinking here

1019

00:42:38,910 --> 00:42:37,330

you can hear in the background is people

1020

00:42:40,980 --> 00:42:38,920

here in Melbourne trying desperately

1021

00:42:44,310 --> 00:42:40,990

trying to copy what we do in Sydney with

1022

00:42:45,630 --> 00:42:44,320

the thank you would the the think tank

1023

00:42:47,430 --> 00:42:45,640

and i'd like to welcome everybody here

1024

00:42:49,410 --> 00:42:47,440

at the table to the melbourne think tank

1025

00:42:53,820 --> 00:42:49,420

it's very exciting we're sitting out

1026
00:42:55,680 --> 00:42:53,830
here as the giant umbrella clothes away

1027
00:42:57,750 --> 00:42:55,690
above our heads i'm here with steve

1028
00:42:59,610 --> 00:42:57,760
roberts hi Steve hi Richard how are you

1029
00:43:00,900 --> 00:42:59,620
going I'm doing well and thank you for

1030
00:43:02,550 --> 00:43:00,910
hosting me down here in Melbourne I'm

1031
00:43:04,710 --> 00:43:02,560
always glad to see you here so thank you

1032
00:43:07,710 --> 00:43:04,720
and thank you for the lovely barbecue

1033
00:43:10,290 --> 00:43:07,720
are about to have oh well yes it was see

1034
00:43:11,640 --> 00:43:10,300
that comes out silly goodness yeah but I

1035
00:43:16,950 --> 00:43:11,650
love having you here so best laugh I've

1036
00:43:18,510 --> 00:43:16,960
had four weeks I see no I'll get

1037
00:43:21,420 --> 00:43:18,520
everybody around the table to introduce

1038
00:43:23,280 --> 00:43:21,430

themselves hi I'm Chris Higgins the

1039

00:43:26,580 --> 00:43:23,290

famous Chris Higgins very very famous

1040

00:43:28,770 --> 00:43:26,590

who who is looking after James Randi of

1041

00:43:31,770 --> 00:43:28,780

course during town well we say looking

1042

00:43:34,020 --> 00:43:31,780

after it was I can't really mention it

1043

00:43:37,170 --> 00:43:34,030

it's it's classified I see ya nice to

1044

00:43:38,730 --> 00:43:37,180

meet you but it was yeah I know you had

1045

00:43:40,470 --> 00:43:38,740

a wonderful time of town Australia we

1046

00:43:42,510 --> 00:43:40,480

are and certainly working with james

1047

00:43:45,480 --> 00:43:42,520

randi i had a really really good time it

1048

00:43:47,340 --> 00:43:45,490

was a really unique sort of perspective

1049

00:43:51,120 --> 00:43:47,350

on how the whole thing works over there

1050

00:43:53,370 --> 00:43:51,130

and what he gets up to okay and we have

1051
00:43:55,080 --> 00:43:53,380
no mouth occurs here from the Victorian

1052
00:43:56,640 --> 00:43:55,090
skeptics mal Vickers from the Victorian

1053
00:44:00,810 --> 00:43:56,650
skeptics great to see you coming along

1054
00:44:02,880 --> 00:44:00,820
here today and I must thank you you and

1055
00:44:06,450 --> 00:44:02,890
group of people took some of us to a

1056
00:44:07,950 --> 00:44:06,460
wildlife park a few months back after

1057
00:44:10,080 --> 00:44:07,960
Tammy Australia so it's a lovely place

1058
00:44:12,060 --> 00:44:10,090
yeah yeah the rain held off for us

1059
00:44:14,010 --> 00:44:12,070
during the days it was great it was

1060
00:44:17,390 --> 00:44:14,020
great and just to tell everybody your

1061
00:44:21,450 --> 00:44:17,400
position in the Victorian skeptics is um

1062
00:44:24,780 --> 00:44:21,460
general dogsbody all look after the

1063
00:44:26,910 --> 00:44:24,790

website mainly okay yeah partly

1064

00:44:29,490 --> 00:44:26,920

responsible for that partly responsible

1065

00:44:31,710 --> 00:44:29,500

and of course the dear old friend of

1066

00:44:33,780 --> 00:44:31,720

mine Rose me hello rose me hello Richard

1067

00:44:35,430 --> 00:44:33,790

good to see you thank you now we've

1068

00:44:37,980 --> 00:44:35,440

known each other for many years actually

1069

00:44:39,660 --> 00:44:37,990

you've been involved in the The

1070

00:44:40,970 --> 00:44:39,670

Skeptical movement for quite some time I

1071

00:44:42,859 --> 00:44:40,980

don't even know

1072

00:44:44,120 --> 00:44:42,869

or remember when we met it must have

1073

00:44:47,500 --> 00:44:44,130

been 10 years ago or something at least

1074

00:44:52,340 --> 00:44:47,510

would have been yes back in the late

1075

00:44:53,960 --> 00:44:52,350

1990s possibly yes and sitting at the

1076
00:44:55,970 --> 00:44:53,970
end of the table somebody who Twitter

1077
00:44:59,720 --> 00:44:55,980
followers would probably know very well

1078
00:45:02,420 --> 00:44:59,730
under the tag of postie Lindley it's

1079
00:45:04,460 --> 00:45:02,430
we're posting lindley for the lone

1080
00:45:07,390 --> 00:45:04,470
deranged ER the loans Reggie wait a

1081
00:45:09,890 --> 00:45:07,400
minute wait a minute hear that music

1082
00:45:13,120 --> 00:45:09,900
there we are it's her theme song folks

1083
00:45:16,370 --> 00:45:13,130
the lone deranged of posted Lili hello

1084
00:45:18,140 --> 00:45:16,380
I'm well I'm embarrassed because just a

1085
00:45:20,060 --> 00:45:18,150
little while ago we had a lovely chat in

1086
00:45:24,950 --> 00:45:20,070
an interview and then I said oh it

1087
00:45:26,750 --> 00:45:24,960
didn't record yeah so she's not very

1088
00:45:28,520 --> 00:45:26,760

happy with me but we were discussing all

1089

00:45:30,770 --> 00:45:28,530

sorts of wonderful things about your

1090

00:45:33,080 --> 00:45:30,780

getting into skepticism and how you're

1091

00:45:35,300 --> 00:45:33,090

discovering this amazing world of

1092

00:45:37,550 --> 00:45:35,310

like-minded people and you're making

1093

00:45:39,260 --> 00:45:37,560

some really great contacts did something

1094

00:45:43,430 --> 00:45:39,270

I've been into for a hell of a long time

1095

00:45:46,190 --> 00:45:43,440

since a primary school high school the

1096

00:45:49,250 --> 00:45:46,200

teachers teaching me skepticism through

1097

00:45:50,750 --> 00:45:49,260

choice magazine but um it's only now

1098

00:45:52,730 --> 00:45:50,760

that I've actually found out this

1099

00:45:55,099 --> 00:45:52,740

obviously we all know these other people

1100

00:45:58,000 --> 00:45:55,109

into it but getting on social networks

1101

00:46:00,590 --> 00:45:58,010

and actually being able to talk about it

1102

00:46:06,250 --> 00:46:00,600

going to Tam and meeting up with people

1103

00:46:12,050 --> 00:46:08,960

cheats you glance and I at me then folks

1104

00:46:13,700 --> 00:46:12,060

I must say oh dear Steve like we do with

1105

00:46:15,320 --> 00:46:13,710

these young people we do follow the same

1106

00:46:16,700 --> 00:46:15,330

band actually mean later you would just

1107

00:46:20,390 --> 00:46:16,710

find just going to be do follow the same

1108

00:46:23,510 --> 00:46:20,400

band hot wind yeah so there there's a

1109

00:46:26,680 --> 00:46:23,520

thing they must be about 70 vinyl silver

1110

00:46:30,320 --> 00:46:26,690

machine we're going to listen to that

1111

00:46:35,060 --> 00:46:30,330

Zimmer frame she'll never friend now I'm

1112

00:46:37,970 --> 00:46:35,070

a little she so but idea we haven't even

1113

00:46:39,650 --> 00:46:37,980

begun drinking it you had a wonderful

1114

00:46:41,870 --> 00:46:39,660

time at chemistry you're telling me

1115

00:46:43,910 --> 00:46:41,880

earlier along with christina and i hope

1116

00:46:45,770 --> 00:46:43,920

most of the people who came along and

1117

00:46:47,990 --> 00:46:45,780

you were telling me all sorts of stories

1118

00:46:50,710 --> 00:46:48,000

about the night you were went to the

1119

00:46:54,040 --> 00:46:50,720

karaoke karaoke with a

1120

00:46:57,670 --> 00:46:54,050

Croucher brothers and I went there with

1121

00:46:59,500 --> 00:46:57,680

my friend Frankie james and i think you

1122

00:47:02,349 --> 00:46:59,510

know an effects gold was there of course

1123

00:47:05,440 --> 00:47:02,359

he was and I yeah we sang songs with

1124

00:47:07,990 --> 00:47:05,450

George Robbie turned up later on yeah

1125

00:47:09,580 --> 00:47:08,000

well I was yeah I try to get people to

1126
00:47:11,280 --> 00:47:09,590
come down because everyone was upstairs

1127
00:47:17,170 --> 00:47:11,290
and I said no we're going to do karaoke

1128
00:47:19,599 --> 00:47:17,180
no be free to get free drinks I've sang

1129
00:47:22,470 --> 00:47:19,609
a song with that I think both Nick and

1130
00:47:25,930 --> 00:47:22,480
Tom and we sang the galaxy song

1131
00:47:29,230 --> 00:47:25,940
originally by Eric Idle really and so

1132
00:47:32,080 --> 00:47:29,240
they we sang that same couple of songs

1133
00:47:34,690 --> 00:47:32,090
and then George Robbie mr. Habib you

1134
00:47:36,339 --> 00:47:34,700
were to write turned out what the kids

1135
00:47:38,650 --> 00:47:36,349
are calling yeah she is calling her

1136
00:47:42,339 --> 00:47:38,660
Rubby Rubby I love you so he turned up

1137
00:47:46,540 --> 00:47:42,349
and stole the show of course he was just

1138
00:47:49,240 --> 00:47:46,550

like singing lights dance by David Bowie

1139

00:47:51,099 --> 00:47:49,250

he gave the course he said it was shot

1140

00:47:53,680 --> 00:47:51,109

in Sydney which it was in one of the

1141

00:47:56,380 --> 00:47:53,690

pubs in Sydney yeah and uh yeah he just

1142

00:48:01,150 --> 00:47:56,390

what was the other song that's it

1143

00:48:03,609 --> 00:48:01,160

everyone went off on that gin gin from

1144

00:48:06,520 --> 00:48:03,619

Tasmania he went absolutely nuts on that

1145

00:48:07,960 --> 00:48:06,530

song so which is which is bringing me to

1146

00:48:09,970 --> 00:48:07,970

something I wanted to discuss with you

1147

00:48:12,520 --> 00:48:09,980

and everybody here at the table one of

1148

00:48:14,079 --> 00:48:12,530

the aspects of skepticism now we do so

1149

00:48:16,300 --> 00:48:14,089

much and there is so much to know and

1150

00:48:18,790 --> 00:48:16,310

learn as you're finding out Lindley in a

1151

00:48:21,190 --> 00:48:18,800

skepticism well it's more um with the

1152

00:48:25,680 --> 00:48:21,200

homeopathy side and the medical side

1153

00:48:28,839 --> 00:48:25,690

that um I'm needing to learn about its

1154

00:48:30,910 --> 00:48:28,849

didn't grow up with science you're

1155

00:48:32,440 --> 00:48:30,920

skeptical interest really is in the in

1156

00:48:34,210 --> 00:48:32,450

the classics like they're great on the

1157

00:48:35,710 --> 00:48:34,220

paranormal in the Bigfoot some new

1158

00:48:40,000 --> 00:48:35,720

that's all the stuff that's the stuff i

1159

00:48:42,310 --> 00:48:40,010

love conspiracies UFOs Bigfoot monsters

1160

00:48:45,940 --> 00:48:42,320

monster dog is a good podcast for all

1161

00:48:49,450 --> 00:48:45,950

that joe nickell i follow with his blog

1162

00:48:51,970 --> 00:48:49,460

with this fantastic yes and it's like a

1163

00:48:57,400 --> 00:48:51,980

lot of on paranormal research like a lot

1164

00:48:58,820 --> 00:48:57,410

of things about defining your tarot

1165

00:49:02,900 --> 00:48:58,830

cards and

1166

00:49:04,850 --> 00:49:02,910

and that stupid water divining the rods

1167

00:49:06,560 --> 00:49:04,860

and well this is what we call the

1168

00:49:10,130 --> 00:49:06,570

classics no rosemary you've been

1169

00:49:11,960 --> 00:49:10,140

involved with water divining and I know

1170

00:49:14,390 --> 00:49:11,970

Steve you've been involved in urbana too

1171

00:49:17,120 --> 00:49:14,400

I mean there's so much to know and learn

1172

00:49:19,040 --> 00:49:17,130

about skepticism but what's what's your

1173

00:49:21,920 --> 00:49:19,050

opinion about keeping ourselves grounded

1174

00:49:26,210 --> 00:49:21,930

in what I guess I'd call the the

1175

00:49:28,130 --> 00:49:26,220

classics Oh necessary that's it so you

1176

00:49:30,620 --> 00:49:28,140

know you have to keep grounding the

1177

00:49:33,200 --> 00:49:30,630

classical method of skepticism in envy

1178

00:49:35,420 --> 00:49:33,210

methods of Investigation making fair

1179

00:49:38,240 --> 00:49:35,430

test being open to evidence be open to

1180

00:49:41,990 --> 00:49:38,250

claimed actually being true and we test

1181

00:49:44,330 --> 00:49:42,000

them in a property fair manner and come

1182

00:49:45,860 --> 00:49:44,340

to a good results so valid results and

1183

00:49:49,310 --> 00:49:45,870

we have to be grounded in that

1184

00:49:51,050 --> 00:49:49,320

technology in that attitude first of all

1185

00:49:53,510 --> 00:49:51,060

and then you can then apply that to

1186

00:49:56,000 --> 00:49:53,520

water divining hungry offer the UFOs

1187

00:49:58,850 --> 00:49:56,010

whatever there is you can view if you

1188

00:50:02,060 --> 00:49:58,860

establish a fair test or fair set of

1189

00:50:03,560 --> 00:50:02,070

criteria to judge the phenomenon by and

1190

00:50:05,000 --> 00:50:03,570

you can make a reasonable pronouncement

1191

00:50:07,220 --> 00:50:05,010

about it but you can't start with a

1192

00:50:09,800 --> 00:50:07,230

conclusion no because so well they can't

1193

00:50:12,080 --> 00:50:09,810

be any UFOs so no therefore you Saudi

1194

00:50:13,520 --> 00:50:12,090

must be wrong because then people will

1195

00:50:14,810 --> 00:50:13,530

be all over you they'll say well what

1196

00:50:16,970 --> 00:50:14,820

about this this this and this and we

1197

00:50:19,100 --> 00:50:16,980

were talking earlier lindley about Dish

1198

00:50:20,900 --> 00:50:19,110

galloping yes yeah how people can do

1199

00:50:22,820 --> 00:50:20,910

that they can steamroll you with endless

1200

00:50:24,140 --> 00:50:22,830

references and you've got no hope you're

1201

00:50:25,340 --> 00:50:24,150

distant and where to start you don't

1202

00:50:27,260 --> 00:50:25,350

know where Scott I'm gonna way to

1203

00:50:29,900 --> 00:50:27,270

criticize to actually come across as

1204

00:50:32,960 --> 00:50:29,910

quite as intelligent enough to fight

1205

00:50:35,840 --> 00:50:32,970

someone who has studied enough even with

1206

00:50:39,470 --> 00:50:35,850

Jenny McCarthy she has done a research

1207

00:50:41,420 --> 00:50:39,480

in what she believes in is right but to

1208

00:50:44,140 --> 00:50:41,430

actually fight her back and tell her

1209

00:50:49,130 --> 00:50:44,150

that she might be a little bit miss

1210

00:50:51,710 --> 00:50:49,140

informed my with the white in brackets

1211

00:50:53,300 --> 00:50:51,720

well I think you're discovering there is

1212

00:50:57,310 --> 00:50:53,310

a lot to learn yeah there's a lot of

1213

00:51:00,530 --> 00:50:57,320

people who do know where to start and

1214

00:51:02,840 --> 00:51:00,540

medical research is not my background so

1215

00:51:04,370 --> 00:51:02,850

on well we've all I mean we all have a

1216

00:51:05,990 --> 00:51:04,380

lot to learn all the time but I can

1217

00:51:09,200 --> 00:51:06,000

appreciate from someone from your point

1218

00:51:11,030 --> 00:51:09,210

of view really getting your feet and up

1219

00:51:12,829 --> 00:51:11,040

to your waist and up it goes into the

1220

00:51:15,140 --> 00:51:12,839

muddy waters of skepticism how

1221

00:51:17,839 --> 00:51:15,150

much there is to learn yes but I

1222

00:51:21,309 --> 00:51:17,849

particularly remember rosemary the fun

1223

00:51:25,700 --> 00:51:21,319

time we had a millimeter oh yeah Oh in

1224

00:51:27,829 --> 00:51:25,710

2002 yes there were two ministers at we

1225

00:51:30,739 --> 00:51:27,839

but this is the water divining test yes

1226

00:51:32,809 --> 00:51:30,749

and Richard made a film was the second

1227

00:51:35,420 --> 00:51:32,819

one but the thing I remember best was

1228

00:51:38,749 --> 00:51:35,430

the excuses that the diviners came up

1229

00:51:42,289 --> 00:51:38,759

with when they're divining implements

1230

00:51:44,539 --> 00:51:42,299

didn't work and there was fact that was

1231

00:51:47,450 --> 00:51:44,549

really fun yeah and this is something I

1232

00:51:49,370 --> 00:51:47,460

wanted to touch on as much as there is a

1233

00:51:52,130 --> 00:51:49,380

lot to learn and we all have a lot to

1234

00:51:54,650 --> 00:51:52,140

learn about what we talked about so we

1235

00:51:57,079 --> 00:51:54,660

know what we're talking about but I

1236

00:51:59,630 --> 00:51:57,089

really enjoy the social aspect of

1237

00:52:02,749 --> 00:51:59,640

skepticism it is fantastic when you

1238

00:52:05,479 --> 00:52:02,759

wouldn't you say so Chris no no getting

1239

00:52:07,609 --> 00:52:05,489

mighty Lindley that's not sure I I agree

1240

00:52:10,400 --> 00:52:07,619

to our town was one of my first really

1241

00:52:12,620 --> 00:52:10,410

oh sorry Tam in Vegas 2010 was my first

1242

00:52:13,459 --> 00:52:12,630

big sort of social social experience and

1243

00:52:14,719 --> 00:52:13,469

that's of course what about you guys

1244

00:52:17,299 --> 00:52:14,729

that's right yeah a whole bunch of other

1245

00:52:20,089 --> 00:52:17,309

people from from the states from the UK

1246

00:52:22,430 --> 00:52:20,099

but tam this year in sorry what were you

1247

00:52:25,609 --> 00:52:22,440

is it now last year left a monster last

1248

00:52:27,049 --> 00:52:25,619

year Tom Australia was amazing I've had

1249

00:52:29,089 --> 00:52:27,059

so many people that you know I think I

1250

00:52:33,140 --> 00:52:29,099

met every single person that that Randy

1251
00:52:36,319 --> 00:52:33,150
met so you know it's 660 people remember

1252
00:52:37,910 --> 00:52:36,329
three days yeah really really thoroughly

1253
00:52:41,809 --> 00:52:37,920
enjoyable I think we need to do more of

1254
00:52:43,759 --> 00:52:41,819
it yeah and but for a social basis of

1255
00:52:45,469 --> 00:52:43,769
friends too I mean you don't even have

1256
00:52:46,969 --> 00:52:45,479
to talk about skepticism know you meet

1257
00:52:48,739 --> 00:52:46,979
some really great people and you can go

1258
00:52:50,739 --> 00:52:48,749
and fight kites together or something

1259
00:52:53,150 --> 00:52:50,749
like that you know other interests

1260
00:52:56,560 --> 00:52:53,160
skirmish sushi Dushi we should go

1261
00:52:58,570 --> 00:52:56,570
skirmish I just go more

1262
00:53:04,920 --> 00:52:58,580
pain motor so I can self scare me

1263
00:53:07,980 --> 00:53:04,930

skeptical motorcycle yes it was no pants

1264

00:53:10,180 --> 00:53:07,990

you drive up something to be skeptical

1265

00:53:20,050 --> 00:53:10,190

then we could shoot each other and have

1266

00:53:21,730 --> 00:53:20,060

no pets that's right it's really good to

1267

00:53:23,980 --> 00:53:21,740

meet people from all walks of life of

1268

00:53:26,140 --> 00:53:23,990

all ages young and old in various jobs

1269

00:53:29,260 --> 00:53:26,150

in you know executive management right

1270

00:53:32,290 --> 00:53:29,270

down to virtually the unemployed and the

1271

00:53:36,070 --> 00:53:32,300

nobody really cares you know and if you

1272

00:53:37,840 --> 00:53:36,080

can be mixed together yeah yeah it's the

1273

00:53:40,410 --> 00:53:37,850

same we do you think having comedy to

1274

00:53:42,610 --> 00:53:40,420

respect for science massage method

1275

00:53:44,320 --> 00:53:42,620

that's really about then people quite

1276

00:53:46,030 --> 00:53:44,330

different after as artistic people and

1277

00:53:48,730 --> 00:53:46,040

so we all have different interests in

1278

00:53:50,560 --> 00:53:48,740

life but there's one really combining

1279

00:53:52,210 --> 00:53:50,570

factor but I guess that's because we're

1280

00:53:53,890 --> 00:53:52,220

all human and that's a typical trade of

1281

00:53:55,930 --> 00:53:53,900

being human isn't it looking for like

1282

00:53:57,850 --> 00:53:55,940

minded people to socialize with and I

1283

00:54:00,490 --> 00:53:57,860

mean that's why we don't hang out with

1284

00:54:02,290 --> 00:54:00,500

them homeopaths because what are we

1285

00:54:05,410 --> 00:54:02,300

going to talk about you know is

1286

00:54:07,180 --> 00:54:05,420

witnesses things that we will have a

1287

00:54:10,210 --> 00:54:07,190

Dogma say if you've hung your fan

1288

00:54:13,330 --> 00:54:10,220

especially as I captain I got a cat it's

1289

00:54:17,530 --> 00:54:13,340

around here somewhere you've got a what

1290

00:54:20,950 --> 00:54:17,540

hot dog my teddy from a bank alt ism and

1291

00:54:25,990 --> 00:54:20,960

where is it I'm not talent we were

1292

00:54:28,720 --> 00:54:26,000

moving right along it was good it is on

1293

00:54:30,370 --> 00:54:28,730

my facebook page mmm you've got a tattoo

1294

00:54:31,810 --> 00:54:30,380

on your Facebook page that's cheating

1295

00:54:35,800 --> 00:54:31,820

why does it should be on your body

1296

00:54:39,390 --> 00:54:35,810

honestly somebody's calm about over my

1297

00:54:48,160 --> 00:54:45,790

now do you see what what we're saying

1298

00:54:49,690 --> 00:54:48,170

here would you be of a similar mind have

1299

00:54:51,520 --> 00:54:49,700

you found lots of interesting new

1300

00:54:54,070 --> 00:54:51,530

friends and social context yeah

1301
00:54:56,170 --> 00:54:54,080
absolutely I I just enjoy talking to

1302
00:54:58,120 --> 00:54:56,180
people where you know the conversations

1303
00:54:59,830 --> 00:54:58,130
not going to dressed into you know when

1304
00:55:02,710 --> 00:54:59,840
you talk to people and they come out

1305
00:55:05,740 --> 00:55:02,720
with all sorts of world anything no I

1306
00:55:07,270 --> 00:55:05,750
just find it so much nicer to talk to

1307
00:55:08,950 --> 00:55:07,280
skeptics and at least they're informed

1308
00:55:11,800 --> 00:55:08,960
about science and all those things and

1309
00:55:14,500 --> 00:55:11,810
it's just so much easier they don't read

1310
00:55:17,170 --> 00:55:14,510
astrology well I hope they read the ones

1311
00:55:19,090 --> 00:55:17,180
that I right in the skeptic magazine oh

1312
00:55:20,940 --> 00:55:19,100
I right under the name of do a fee cap

1313
00:55:24,100 --> 00:55:20,950

which is fraud fake backwards you

1314

00:55:27,400 --> 00:55:24,110

so-called new style sign they've made up

1315

00:55:30,010 --> 00:55:27,410

that's been a galaxy for a set of stars

1316

00:55:31,900 --> 00:55:30,020

yeah the constellation forever but

1317

00:55:34,900 --> 00:55:31,910

someone tweeted that it's only just been

1318

00:55:37,990 --> 00:55:34,910

around since 1992 some astrologer on

1319

00:55:40,720 --> 00:55:38,000

Twitter and I said oh you mean some Oh

1320

00:55:43,060 --> 00:55:40,730

some sweet astrologer yes and she just

1321

00:55:45,160 --> 00:55:43,070

said I it's only been around since 1992

1322

00:55:48,190 --> 00:55:45,170

so I said I it so it's just gained its

1323

00:55:53,770 --> 00:55:48,200

magical mystical mystical powers and I

1324

00:55:58,420 --> 00:55:53,780

haven't heard back sense but uh but yes

1325

00:55:59,650 --> 00:55:58,430

um Orpheus or not Lucas this is

1326

00:56:01,660 --> 00:55:59,660

interesting because this is something

1327

00:56:03,310 --> 00:56:01,670

the skeptics have been banging on for

1328

00:56:05,140 --> 00:56:03,320

four years and years and years and years

1329

00:56:07,480 --> 00:56:05,150

and then suddenly somebody else mentions

1330

00:56:10,030 --> 00:56:07,490

it somebody and and the media pick it up

1331

00:56:12,250 --> 00:56:10,040

and they all go crazy about it the start

1332

00:56:13,300 --> 00:56:12,260

of the stars are very old I mean the

1333

00:56:16,570 --> 00:56:13,310

probably older than the earth is

1334

00:56:18,490 --> 00:56:16,580

probably older than you give me four and

1335

00:56:23,920 --> 00:56:18,500

a half for a half billion years it saw

1336

00:56:26,740 --> 00:56:23,930

as much to solving you [h__h] twin is

1337

00:56:29,410 --> 00:56:26,750

good yeah there's the star to be there

1338

00:56:31,480 --> 00:56:29,420

since the dawn of time and the

1339

00:56:33,130 --> 00:56:31,490

consolations have been updating if not

1340

00:56:35,500 --> 00:56:33,140

named as such by a committee the

1341

00:56:37,300 --> 00:56:35,510

consolations that that means it be there

1342

00:56:39,760 --> 00:56:37,310

a little bit and we were little bit yeah

1343

00:56:41,650 --> 00:56:39,770

but they essentially there for millennia

1344

00:56:43,150 --> 00:56:41,660

yeah and offer you could have been there

1345

00:56:45,220 --> 00:56:43,160

from an alien the Sun been plowing

1346

00:56:47,140 --> 00:56:45,230

through it familiar to some astrology

1347

00:56:48,160 --> 00:56:47,150

was looking up to the sky sir oh what's

1348

00:56:54,190 --> 00:56:48,170

that

1349

00:56:56,109 --> 00:56:54,200

she does it all this again this gets

1350

00:56:58,690 --> 00:56:56,119

back to the being grounded in the

1351

00:56:59,980 --> 00:56:58,700

classic so we say astrology is one of

1352

00:57:01,240 --> 00:56:59,990

the classics of what we should be

1353

00:57:03,520 --> 00:57:01,250

grounded and we should at least have a

1354

00:57:07,720 --> 00:57:03,530

working knowledge of footbed I think

1355

00:57:09,700 --> 00:57:07,730

they're talking about I don't know

1356

00:57:12,460 --> 00:57:09,710

either but at least we at least we

1357

00:57:14,280 --> 00:57:12,470

should a year or so ago I appeared on

1358

00:57:16,750 --> 00:57:14,290

the television show with them

1359

00:57:20,440 --> 00:57:16,760

Australia's greatest astrologer Milton

1360

00:57:23,980 --> 00:57:20,450

black and people can look at that look

1361

00:57:25,960 --> 00:57:23,990

that up on youtube its Richard Saunders

1362

00:57:28,510 --> 00:57:25,970

talks about astrology i think is the

1363

00:57:31,559 --> 00:57:28,520

title and i did my little bit of

1364

00:57:33,789 --> 00:57:31,569

research on Milton black and to be

1365

00:57:35,470 --> 00:57:33,799

straightforward I just mopped the floor

1366

00:57:37,299 --> 00:57:35,480

with him you know I really did I went to

1367

00:57:39,370 --> 00:57:37,309

town on him that's because I knew what

1368

00:57:41,710 --> 00:57:39,380

he was going to say and I knew that

1369

00:57:44,260 --> 00:57:41,720

astrology has no basis so I took it from

1370

00:57:46,359 --> 00:57:44,270

there but it's it's knowing that and

1371

00:57:47,680 --> 00:57:46,369

knowing what the homeopaths are going to

1372

00:57:50,319 --> 00:57:47,690

come up with and knowing behind it

1373

00:57:51,900 --> 00:57:50,329

because the worst thing is someone

1374

00:57:55,930 --> 00:57:51,910

calling them ourselves a skeptic and

1375

00:57:57,069 --> 00:57:55,940

then utterly being lost for the argument

1376

00:57:59,319 --> 00:57:57,079

or words when they come across a

1377

00:58:01,270 --> 00:57:59,329

believer they just look wrong hmm and

1378

00:58:03,160 --> 00:58:01,280

they don't do a service at all and

1379

00:58:05,410 --> 00:58:03,170

that's the thing is just knowing how to

1380

00:58:07,920 --> 00:58:05,420

argue with someone I mean you might be

1381

00:58:11,440 --> 00:58:07,930

an armchair skeptic which I've been four

1382

00:58:13,299 --> 00:58:11,450

damn hat knows how long but I'm actually

1383

00:58:17,170 --> 00:58:13,309

knowing how to argue with someone and

1384

00:58:20,170 --> 00:58:17,180

come across as somewhat intelligent and

1385

00:58:22,690 --> 00:58:20,180

to be able to convince try to convince

1386

00:58:25,660 --> 00:58:22,700

them that they're wrong that's how about

1387

00:58:27,370 --> 00:58:25,670

oh you don't you have no idea I mean of

1388

00:58:29,319 --> 00:58:27,380

course they'd be doing the same thing

1389

00:58:32,770 --> 00:58:29,329

trying to convince us that way wrong and

1390

00:58:36,099 --> 00:58:32,780

and trying to find they're up against

1391

00:58:37,329 --> 00:58:36,109

the GRIK wallets yeah I can I can I see

1392

00:58:39,490 --> 00:58:37,339

your point of view because from their

1393

00:58:42,099 --> 00:58:39,500

point of view where the one here who are

1394

00:58:45,309 --> 00:58:42,109

closed-minded and dogmatic of course you

1395

00:58:47,829 --> 00:58:45,319

can open your mind to get in all these

1396

00:58:50,520 --> 00:58:47,839

powers and so I don't know I I wouldn't

1397

00:58:52,599 --> 00:58:50,530

mind doing that I've got a few powers

1398

00:58:54,160 --> 00:58:52,609

escaped me has to be more of a minder

1399

00:58:56,500 --> 00:58:54,170

than anybody else but you have to be

1400

00:58:58,930 --> 00:58:56,510

open to evidence if it comes along even

1401

00:59:00,400 --> 00:58:58,940

if you don't like it just hasn't

1402

00:59:02,140 --> 00:59:00,410

happened yet

1403

00:59:04,450 --> 00:59:02,150

has some people have changed their minds

1404

00:59:06,910 --> 00:59:04,460

about some things because evidence has

1405

00:59:08,350 --> 00:59:06,920

been forgive me alrighty i'm sorry

1406

00:59:09,820 --> 00:59:08,360

you're right but if i do if i think

1407

00:59:11,770 --> 00:59:09,830

about the classics it has an element

1408

00:59:13,810 --> 00:59:11,780

because i love not only you and i

1409

00:59:15,970 --> 00:59:13,820

watched a documentary last night made

1410

00:59:18,400 --> 00:59:15,980

from 1976 with Peter Graves called

1411

00:59:20,320 --> 00:59:18,410

mysterious monsters about Bigfoot about

1412

00:59:22,240 --> 00:59:20,330

a Bigfoot well there i'd be big feet

1413

00:59:27,460 --> 00:59:22,250

Bigfoot's out there but nobody's caught

1414

00:59:31,390 --> 00:59:27,470

one yet yeah so fate oh so tell me more

1415

00:59:33,940 --> 00:59:31,400

about your tattoo prohibit the feet

1416

00:59:35,890 --> 00:59:33,950

shown was so big it was like five or six

1417

00:59:37,750 --> 00:59:35,900

times the area of a human foot see have

1418

00:59:38,890 --> 00:59:37,760

to be yesterday five or six times the

1419

00:59:41,320 --> 00:59:38,900

weight of a human to leave her

1420

00:59:42,550 --> 00:59:41,330

impression that big and all sorts of

1421

00:59:44,800 --> 00:59:42,560

problems will arise about the structure

1422

00:59:46,720 --> 00:59:44,810

of a body that big that having this been

1423

00:59:48,610 --> 00:59:46,730

overs for a Bigfoot and people point out

1424

00:59:50,260 --> 00:59:48,620

in the program nobody bought a deadbeat

1425

00:59:51,760 --> 00:59:50,270

full body out you know what the funniest

1426
00:59:54,070 --> 00:59:51,770
thing of that program for me last night

1427
00:59:56,350 --> 00:59:54,080
then this car expected to tam Australia

1428
00:59:58,660 --> 00:59:56,360
is at one stage believe it or not they

1429
01:00:03,000 --> 00:59:58,670
were scientists actually disgusting

1430
01:00:05,860 --> 01:00:03,010
Bigfoot's boobs yeah I am not kidding

1431
01:00:07,540 --> 01:00:05,870
yeah remember that the Patterson film

1432
01:00:09,370 --> 01:00:07,550
right yeah and it and they're looking at

1433
01:00:11,590 --> 01:00:09,380
it saying it seems to have these big

1434
01:00:12,970 --> 01:00:11,600
breasts out in front foot boobs I really

1435
01:00:15,010 --> 01:00:12,980
fell off the chairs they say well no

1436
01:00:17,200 --> 01:00:15,020
problem yeah he's got the sort pointing

1437
01:00:19,210 --> 01:00:17,210
ahead of a male but the big boobs big

1438
01:00:20,800 --> 01:00:19,220

boobs or a female them and one of you

1439

01:00:22,810 --> 01:00:20,810

people my life's come to I'm watching a

1440

01:00:24,040 --> 01:00:22,820

documentary about Bigfoot's boobs I was

1441

01:00:25,750 --> 01:00:24,050

one of the Bigfoot believers point out

1442

01:00:27,940 --> 01:00:25,760

you know what do you know about Bigfoot

1443

01:00:31,900 --> 01:00:27,950

boobs anyway maybe they're all pointy

1444

01:00:34,300 --> 01:00:31,910

agent becomes getting a in Bigfoot

1445

01:00:37,120 --> 01:00:34,310

browse or something you know we're going

1446

01:00:44,590 --> 01:00:37,130

to start marketing Bigfoot bra I like

1447

01:00:46,810 --> 01:00:44,600

that it's the Bigfoot breast enhancer

1448

01:00:50,830 --> 01:00:46,820

I'm trying to work out what part of

1449

01:00:54,760 --> 01:00:50,840

Tamra minds Richard of boobs oh no

1450

01:00:56,110 --> 01:00:54,770

you're a manual the hashtag rebecca

1451

01:00:59,860 --> 01:00:56,120

watson i was thinking of something i

1452

01:01:02,350 --> 01:00:59,870

said uh wonder when rebecca watson did

1453

01:01:04,390 --> 01:01:02,360

her her her quiz right after me and it

1454

01:01:10,260 --> 01:01:04,400

was Twitter and everyone's a bird that

1455

01:01:12,700 --> 01:01:10,270

was hilarious everyone is it was good

1456

01:01:14,230 --> 01:01:12,710

she's lost the blood she's lost apply

1457

01:01:17,950 --> 01:01:14,240

now what a wonderful time at

1458

01:01:20,260 --> 01:01:17,960

now Chris yeah we were so pleased that

1459

01:01:21,310 --> 01:01:20,270

you were able to come along and and

1460

01:01:25,200 --> 01:01:21,320

you're just the man we're looking

1461

01:01:29,290 --> 01:01:25,210

forward to give Randy the help he needed

1462

01:01:31,420 --> 01:01:29,300

because let's face it he's 82 and he was

1463

01:01:33,550 --> 01:01:31,430

the center of attention but I thought

1464

01:01:35,470 --> 01:01:33,560

its center or Santa he used the center

1465

01:01:38,350 --> 01:01:35,480

of attention attention Eli Zealand um

1466

01:01:40,840 --> 01:01:38,360

but I thought he handled himself at his

1467

01:01:43,540 --> 01:01:40,850

age so well and he was always there for

1468

01:01:45,640 --> 01:01:43,550

people it was incredible yeah I'm then I

1469

01:01:46,990 --> 01:01:45,650

was writing sort of jotting down some

1470

01:01:47,859 --> 01:01:47,000

some notes and stuff about what we did

1471

01:01:49,870 --> 01:01:47,869

the other day I'm trying to write up a

1472

01:01:52,120 --> 01:01:49,880

bitter row prob excuse me a report about

1473

01:01:53,410 --> 01:01:52,130

it and one of the things I kept coming

1474

01:01:54,910 --> 01:01:53,420

back to was the fact that every time I

1475

01:01:56,080 --> 01:01:54,920

said to him you know maybe you maybe she

1476

01:01:58,000 --> 01:01:56,090

kind of a couple of hours rest we got a

1477

01:01:59,320 --> 01:01:58,010

lot on tonight he'd be like nope no good

1478

01:02:01,540 --> 01:01:59,330

you know I want to undo this and want to

1479

01:02:04,180 --> 01:02:01,550

undo that and I I was naked by the end I

1480

01:02:07,930 --> 01:02:04,190

think yes he's fitter than I am it's

1481

01:02:11,109 --> 01:02:07,940

just remarkable at how I am about him he

1482

01:02:16,030 --> 01:02:11,119

was just so yeah personable yeah and so

1483

01:02:18,070 --> 01:02:16,040

out there I was taken aback that it was

1484

01:02:21,460 --> 01:02:18,080

last year or the year before that he was

1485

01:02:23,230 --> 01:02:21,470

very ill no nurse and he was quite weak

1486

01:02:27,280 --> 01:02:23,240

and couldn't interact with people just

1487

01:02:31,540 --> 01:02:27,290

in case he'd catch a disease or

1488

01:02:33,670 --> 01:02:31,550

something reddit town 7 and he was in a

1489

01:02:35,440 --> 01:02:33,680

wheelchair wasn't again and then to

1490

01:02:39,670 --> 01:02:35,450

actually interact with people would have

1491

01:02:42,130 --> 01:02:39,680

been could have done something wrong you

1492

01:02:44,410 --> 01:02:42,140

know him recorded disease immunity was

1493

01:02:46,510 --> 01:02:44,420

compromised what I'm thinking of and now

1494

01:02:49,470 --> 01:02:46,520

he's just shaking everyone's hand she

1495

01:02:52,270 --> 01:02:49,480

can talk to him close and he was just

1496

01:02:54,670 --> 01:02:52,280

there and and of course there's been

1497

01:02:57,340 --> 01:02:54,680

sick just about to say it's been said

1498

01:03:01,150 --> 01:02:57,350

many times but he is as sharp as a tack

1499

01:03:03,310 --> 01:03:01,160

oh yeah just them on the ball very makes

1500

01:03:04,960 --> 01:03:03,320

time for absolutely everyone as well um

1501

01:03:06,310 --> 01:03:04,970

he would if he if you've sort of

1502

01:03:07,690 --> 01:03:06,320

suddenly get a bit knackered you he

1503

01:03:09,790 --> 01:03:07,700

would come to me and say you know Chris

1504

01:03:11,320 --> 01:03:09,800

I think we need to to head off but but

1505

01:03:12,849 --> 01:03:11,330

never before everyone was finished

1506

01:03:14,050 --> 01:03:12,859

coming to say hi and having photographs

1507

01:03:16,090 --> 01:03:14,060

and autographs and all that kind of

1508

01:03:19,440 --> 01:03:16,100

stuff it was really it was remarkable

1509

01:03:21,930 --> 01:03:19,450

like dare we say amazing I easily

1510

01:03:24,120 --> 01:03:21,940

it was amazing but yeah really really

1511

01:03:28,650 --> 01:03:24,130

glad I did it he's not spoken to be seen

1512

01:03:30,630 --> 01:03:28,660

so don't know what I did oh yeah a very

1513

01:03:32,460 --> 01:03:30,640

very cool experience but there is a

1514

01:03:34,770 --> 01:03:32,470

podcast you can download if you haven't

1515

01:03:37,320 --> 01:03:34,780

done it the amazing show with James

1516

01:03:39,210 --> 01:03:37,330

rambling and no yeah I asked him a

1517

01:03:40,890 --> 01:03:39,220

question on that about Doris Stokes and

1518

01:03:44,280 --> 01:03:40,900

online which is what the first time I

1519

01:03:47,480 --> 01:03:44,290

got into james randi back then with the

1520

01:03:49,590 --> 01:03:47,490

water tipping the when wind online

1521

01:03:52,320 --> 01:03:49,600

stormed off the show tolerate the

1522

01:03:54,480 --> 01:03:52,330

pissing off you know whatever and um

1523

01:03:57,680 --> 01:03:54,490

obviously gets played all the time on

1524

01:04:00,180 --> 01:03:57,690

Channel nine when they have their yes

1525

01:04:03,630 --> 01:04:00,190

best of television of television shows

1526

01:04:06,900 --> 01:04:03,640

and um yeah so I'm the amazing show it's

1527

01:04:08,970 --> 01:04:06,910

on iTunes and you can download it and it

1528

01:04:11,610 --> 01:04:08,980

has a question on there that I asked and

1529

01:04:12,960 --> 01:04:11,620

you can probably still actually asked

1530

01:04:15,720 --> 01:04:12,970

questions whether they'll still continue

1531

01:04:17,910 --> 01:04:15,730

the podcast but it's quite good and it

1532

01:04:20,460 --> 01:04:17,920

went for only probably 10 show that's

1533

01:04:22,230 --> 01:04:20,470

because it's great it's Randy with a lot

1534

01:04:23,610 --> 01:04:22,240

of stories but my favorite story from

1535

01:04:26,100 --> 01:04:23,620

you you were telling me just earlier

1536

01:04:28,020 --> 01:04:26,110

verse from town Australia where we met

1537

01:04:31,590 --> 01:04:28,030

by the way we we only met just recently

1538

01:04:34,320 --> 01:04:31,600

and that she was um we can't remember

1539

01:04:35,970 --> 01:04:34,330

was that the the could have been the

1540

01:04:40,620 --> 01:04:35,980

karaoke night or something but you

1541

01:04:42,480 --> 01:04:40,630

wanted to meet may not oh but but I'm

1542

01:04:48,570 --> 01:04:42,490

gonna say what I said before cuz it was

1543

01:04:53,010 --> 01:04:48,580

a square would but I I the f-word I like

1544

01:04:55,440 --> 01:04:53,020

minor I grew up with Maynard on triple j

1545

01:05:00,660 --> 01:04:55,450

and wherever the hell he was whenever he

1546

01:05:04,920 --> 01:05:00,670

was and it was Manor DS is my mindset

1547

01:05:06,630 --> 01:05:04,930

he's got the same sort of humor yeah

1548

01:05:09,570 --> 01:05:06,640

yeah and you really wanted to meet him

1549

01:05:12,090 --> 01:05:09,580

but he was engaged in conversation with

1550

01:05:15,240 --> 01:05:12,100

Brian Dunning and Dunning get out of my

1551
01:05:16,770 --> 01:05:15,250
way I want to speak to Peter I'm sorry

1552
01:05:18,600 --> 01:05:16,780
oh yeah well I said something like oh

1553
01:05:20,550 --> 01:05:18,610
sorry Brian I just want to speak to

1554
01:05:23,430 --> 01:05:20,560
Maine out it's not anything against you

1555
01:05:27,960 --> 01:05:23,440
but I've grown up with Maynard and he's

1556
01:05:29,970 --> 01:05:27,970
my hero be he can have a hero but yes

1557
01:05:31,320 --> 01:05:29,980
sir and then I ended up buying a vodka

1558
01:05:33,540 --> 01:05:31,330
and orange from a nerd

1559
01:05:36,690 --> 01:05:33,550
at the end because you know it's my

1560
01:05:39,240 --> 01:05:36,700
heart and I just absolutely love his

1561
01:05:42,300 --> 01:05:39,250
input to the skeptic zone his yeah it's

1562
01:05:44,520 --> 01:05:42,310
grace knows he's straight up and down

1563
01:05:48,420 --> 01:05:44,530

with he likes what he likes and I want

1564

01:05:50,460 --> 01:05:48,430

to hear something from someone different

1565

01:05:52,650 --> 01:05:50,470

not just the skeptical view I want to

1566

01:05:54,810 --> 01:05:52,660

hear something that's a bit out there

1567

01:05:57,930 --> 01:05:54,820

and i love the out there because it's

1568

01:05:59,820 --> 01:05:57,940

make sure what it's probably why you and

1569

01:06:01,860 --> 01:05:59,830

I got into this in the very first place

1570

01:06:04,010 --> 01:06:01,870

because we love the the out there what

1571

01:06:07,730 --> 01:06:04,020

you know that the strange the mysterious

1572

01:06:13,170 --> 01:06:07,740

911 stuff as much as we know that it's

1573

01:06:15,210 --> 01:06:13,180

bull crap I just love hearing why people

1574

01:06:17,160 --> 01:06:15,220

keep bringing it up and it might be

1575

01:06:20,130 --> 01:06:17,170

forever that they'll keep bringing up

1576

01:06:21,960 --> 01:06:20,140

the same rubbish but it's just amazing

1577

01:06:25,770 --> 01:06:21,970

that these people can continue with

1578

01:06:29,010 --> 01:06:25,780

their the way of thought 911 what's the

1579

01:06:30,690 --> 01:06:29,020

other stuff I'll conspiracies in general

1580

01:06:33,000 --> 01:06:30,700

I'm just trying to think of his name he

1581

01:06:35,580 --> 01:06:33,010

was a football I've got him on Twitter

1582

01:06:38,820 --> 01:06:35,590

and Facebook he's an English for you

1583

01:06:46,560 --> 01:06:38,830

used to be an Englishman no no no king

1584

01:06:48,830 --> 01:06:46,570

of [h__\h] David I of course as I said

1585

01:06:52,290 --> 01:06:48,840

on um one of the podcasts from England

1586

01:06:54,720 --> 01:06:52,300

David Icke yes David Icke king of

1587

01:06:57,390 --> 01:06:54,730

[h__\h] and he is king of [h__\h] up

1588

01:06:59,370 --> 01:06:57,400

but I love reading what he has to say no

1589

01:07:03,180 --> 01:06:59,380

will look we are so pleased at Maynard's

1590

01:07:04,740 --> 01:07:03,190

party so I appreciate the fact that may

1591

01:07:06,270 --> 01:07:04,750

not filled in for me a few weeks back

1592

01:07:08,790 --> 01:07:06,280

and you you thought that was quite funny

1593

01:07:10,770 --> 01:07:08,800

I was just great it was just relieving

1594

01:07:13,920 --> 01:07:10,780

the times when I was 15 and hearing

1595

01:07:17,400 --> 01:07:13,930

Maynard just talked his voice it's just

1596

01:07:19,800 --> 01:07:17,410

perfect for radio may not this is your

1597

01:07:21,990 --> 01:07:19,810

fan she was right here big big fan of my

1598

01:07:23,910 --> 01:07:22,000

dad and and may nights malaise and he's

1599

01:07:26,850 --> 01:07:23,920

mad show and I might actually travel up

1600

01:07:29,670 --> 01:07:26,860

to Sydney for his med show gig in Oxford

1601

01:07:31,740 --> 01:07:29,680

Street i think it is with all the widow

1602

01:07:34,500 --> 01:07:31,750

people out that way but it'll be fun

1603

01:07:36,240 --> 01:07:34,510

that's what it's all about and again I

1604

01:07:37,770 --> 01:07:36,250

suppose we've come in lots of circles

1605

01:07:40,290 --> 01:07:37,780

here but that's coming back to the

1606

01:07:41,560 --> 01:07:40,300

circle of like-minded people and having

1607

01:07:44,290 --> 01:07:41,570

a good time

1608

01:07:46,090 --> 01:07:44,300

and also being skeptics is it's almost a

1609

01:07:48,700 --> 01:07:46,100

side issue sometimes it's a stirred and

1610

01:07:50,560 --> 01:07:48,710

I think he wants to introduce music into

1611

01:07:52,810 --> 01:07:50,570

skepticism which I kind of think is

1612

01:07:55,960 --> 01:07:52,820

quite good too you got George for a bbbj

1613

01:07:58,120 --> 01:07:55,970

and George her over BTW and there's a

1614

01:08:01,240 --> 01:07:58,130

few other people into this skeptical

1615

01:08:03,340 --> 01:08:01,250

music scene but why not ask people what

1616

01:08:05,650 --> 01:08:03,350

sort of music they like in the scene and

1617

01:08:08,080 --> 01:08:05,660

hmm a lot of people are just too up and

1618

01:08:13,510 --> 01:08:08,090

down with their thoughts let's just open

1619

01:08:16,450 --> 01:08:13,520

it up and relax and just get more open

1620

01:08:21,579 --> 01:08:16,460

about skepticism whether it's in music

1621

01:08:23,320 --> 01:08:21,589

or critical thought or everything yeah

1622

01:08:26,110 --> 01:08:23,330

and that's why we're here today I think

1623

01:08:27,400 --> 01:08:26,120

universe in every night yeah we're here

1624

01:08:28,840 --> 01:08:27,410

today we're going to be quite relaxed

1625

01:08:30,700 --> 01:08:28,850

soon because the BBQ is going to be

1626

01:08:32,860 --> 01:08:30,710

starting this year's schedule at

1627

01:08:34,329 --> 01:08:32,870

barbecues but skeptical barbecue we're

1628

01:08:36,099 --> 01:08:34,339

going to crack open another bottle of

1629

01:08:38,500 --> 01:08:36,109

something rather i think is around the

1630

01:08:40,150 --> 01:08:38,510

corner the most of you believe is on the

1631

01:08:42,220 --> 01:08:40,160

spit we're gonna rehearse different

1632

01:08:43,960 --> 01:08:42,230

believes on the spit here but until then

1633

01:08:45,640 --> 01:08:43,970

and I don't want to thank everybody for

1634

01:08:49,900 --> 01:08:45,650

coming along to this lovely little

1635

01:08:52,570 --> 01:08:49,910

afternoon melbourne think tank and so

1636

01:09:13,180 --> 01:08:52,580

we'll grab our glasses here and say

1637

01:09:18,700 --> 01:09:16,430

hello I'm Tony Pittman the presenter of

1638

01:09:21,620 --> 01:09:18,710

the weekly radio show and podcast

1639

01:09:24,079 --> 01:09:21,630

reality check broadcast from here in

1640

01:09:25,910 --> 01:09:24,089

Melbourne Australia and if you like

1641

01:09:27,950 --> 01:09:25,920

listening to the skeptic zone maybe

1642

01:09:31,309 --> 01:09:27,960

you'd like to check out reality check

1643

01:09:34,760 --> 01:09:31,319

each week we bring you a roundup of LGBT

1644

01:09:38,300 --> 01:09:34,770

news that's news related to lesbian gay

1645

01:09:42,019 --> 01:09:38,310

bisexual and transgender issues plus a

1646

01:09:44,059 --> 01:09:42,029

movie review plus a serious skeptical

1647

01:09:48,140 --> 01:09:44,069

analysis of a topic related to

1648

01:09:49,550 --> 01:09:48,150

pseudoscience or the paranormal so if it

1649

01:09:53,240 --> 01:09:49,560

sounds like it could be right up your

1650

01:09:56,930 --> 01:09:53,250

alley visit our website at reality check

1651
01:09:59,959 --> 01:09:56,940
online dot net there you can listen

1652
01:10:17,640 --> 01:09:59,969
online download episodes or subscribe

1653
01:10:22,810 --> 01:10:20,260
thank you for downloading the skeptic

1654
01:10:26,200 --> 01:10:22,820
zonin next week i'm back in melbourne

1655
01:10:29,560 --> 01:10:26,210
once again and I visit the restoration

1656
01:10:32,380 --> 01:10:29,570
of an historic telescope very

1657
01:10:33,820 --> 01:10:32,390
interesting stuff and a special guest we

1658
01:10:36,490 --> 01:10:33,830
have a special guest star coming on the

1659
01:10:38,350 --> 01:10:36,500
show next week it's so special and so

1660
01:10:41,380 --> 01:10:38,360
secret I can't even tell you who it is I

1661
01:10:43,240 --> 01:10:41,390
better find somebody yeah look I'm gonna

1662
01:10:45,520 --> 01:10:43,250
go away and do that you enjoy the rest

1663
01:10:47,470 --> 01:10:45,530

of the week but for now this is Richard

1664

01:10:52,480 --> 01:10:47,480

Saunders signing off from Sydney

1665

01:10:56,800 --> 01:10:52,490

Australia you've been listening to the

1666

01:11:00,040 --> 01:10:56,810

skeptic zone visit our website at WWF

1667

01:11:03,430 --> 01:11:00,050

digs on TV for comments contacts and

1668

01:11:08,470 --> 01:11:03,440

extra video reports