

1
00:00:05,929 --> 00:00:13,669
welcome to the skeptic zone the podcast

2
00:00:09,119 --> 00:00:13,669
from Australia for science and reason

3
00:00:22,670 --> 00:00:30,300
hello and welcome to the skeptic zone

4
00:00:25,500 --> 00:00:33,929
episode number 204 for the 16th of sep

5
00:00:30,300 --> 00:00:36,859
tember 2012 Richard Saunders here with

6
00:00:33,929 --> 00:00:38,729
you from Sydney Australia and

7
00:00:36,859 --> 00:00:40,859
announcement that little announcement

8
00:00:38,729 --> 00:00:44,429
before we start I've just been elected

9
00:00:40,859 --> 00:00:47,039
president of Australian skeptics now I

10
00:00:44,429 --> 00:00:50,100
have held the post before in fact ten

11
00:00:47,039 --> 00:00:51,719
years ago I was first elected to to be

12
00:00:50,100 --> 00:00:53,160
the president of Australian skeptics and

13
00:00:51,719 --> 00:00:55,439
I was present for about three years I

14
00:00:53,159 --> 00:00:57,929
think something like that and then other

15
00:00:55,439 --> 00:01:00,269
people had some time being president

16
00:00:57,929 --> 00:01:03,329
notably of course a Rancic ever just er

17
00:01:00,270 --> 00:01:06,740
done and so the committee in their

18
00:01:03,329 --> 00:01:10,109
wisdom have decided to make me president

19
00:01:06,739 --> 00:01:11,640
one more time it's very different ten

20
00:01:10,109 --> 00:01:13,319
years is a long time is a very different

21
00:01:11,640 --> 00:01:16,200
sort of outlook a very different sort of

22
00:01:13,319 --> 00:01:17,758
committee and scepticism has changed in

23
00:01:16,200 --> 00:01:20,329
the last ten years of course so that's

24
00:01:17,759 --> 00:01:23,340
great i hope i can do a good job as a

25
00:01:20,329 --> 00:01:25,739
president of the Australian skeptics but

26
00:01:23,340 --> 00:01:28,799
let's look now to what's coming up on

27
00:01:25,739 --> 00:01:30,599
the skeptic zone two of my favorite

28
00:01:28,799 --> 00:01:33,299
people in the world folks may not and

29

00:01:30,599 --> 00:01:36,379
Brian Dunning get together to have a

30
00:01:33,299 --> 00:01:40,380
chat this was recorded at tam Las Vegas

31
00:01:36,379 --> 00:01:42,478
Brian Dunning and may not as to people

32
00:01:40,379 --> 00:01:45,478
you want to be in a hot tub with its

33
00:01:42,478 --> 00:01:49,140
brian dunning and may not think about

34
00:01:45,478 --> 00:01:50,908
that one anyway a great chat with brian

35
00:01:49,140 --> 00:01:53,219
dunning is one of our favorite people of

36
00:01:50,909 --> 00:01:54,979
course there are many podcasts out there

37
00:01:53,219 --> 00:01:57,599
folks many skeptical podcast

38
00:01:54,978 --> 00:02:00,840
90-something someone was telling me the

39
00:01:57,599 --> 00:02:03,899
one I never miss the one I listened to

40
00:02:00,840 --> 00:02:07,200
every week without fail is skip toward

41
00:02:03,899 --> 00:02:09,300
of course skip toid that's coming up at

42
00:02:07,200 --> 00:02:12,539
the top of the show then after that it's

43
00:02:09,300 --> 00:02:13,610

the return of dr. Reggie reports dr.

44

00:02:12,539 --> 00:02:15,530

Richie dr. Reggie

45

00:02:13,610 --> 00:02:18,050

Dunlop is going to be killing us more

46

00:02:15,530 --> 00:02:20,360

more fan games with our wacky and crazy

47

00:02:18,050 --> 00:02:23,600

and zany Therapeutic Goods

48

00:02:20,360 --> 00:02:27,080

Administration mm-hmm what are they up

49

00:02:23,599 --> 00:02:30,229

to this week find out soon on dr. Rachel

50

00:02:27,080 --> 00:02:32,750

reports after that it's a message from

51

00:02:30,229 --> 00:02:34,849

Richard Dawkins about his award the

52

00:02:32,750 --> 00:02:37,550

Richard Dawkins award this year it's

53

00:02:34,849 --> 00:02:38,719

gone to one of my favorite people I've

54

00:02:37,550 --> 00:02:39,920

got a lot of favorite people when I come

55

00:02:38,719 --> 00:02:42,590

to think about it but really one of my

56

00:02:39,919 --> 00:02:44,708

favorite people Eugenie Scott from the

57

00:02:42,590 --> 00:02:48,349

National Center for Science Education

58
00:02:44,709 --> 00:02:50,569
congratulations Jeannie well deserved so

59
00:02:48,349 --> 00:02:53,030
you'll hear Richard Dawkins telling us

60
00:02:50,569 --> 00:02:54,650
about the awarding of that prize and

61
00:02:53,030 --> 00:02:57,620
then a little bit from Eugenie Scott

62
00:02:54,650 --> 00:02:59,150
where she discusses the National Center

63
00:02:57,620 --> 00:03:02,480
for Science Education and some of the

64
00:02:59,150 --> 00:03:04,640
tactics that creationists get up to and

65
00:03:02,479 --> 00:03:06,229
to wrap up the show maynard's back one

66
00:03:04,639 --> 00:03:08,750
more time to talk to an old friend of

67
00:03:06,229 --> 00:03:12,019
mine Gary Dalrymple who is one of the

68
00:03:08,750 --> 00:03:14,659
organizers of freak on here in city

69
00:03:12,020 --> 00:03:17,360
which is a free science fiction and

70
00:03:14,659 --> 00:03:20,079
fantasy convention that's coming up very

71
00:03:17,360 --> 00:03:22,940
soon more details at the end of the show

72
00:03:20,080 --> 00:03:26,840
lots of action happening in our solar

73
00:03:22,939 --> 00:03:30,409
system just lately folks I Voyager where

74
00:03:26,840 --> 00:03:33,500
the Voyager spacecraft has crossed some

75
00:03:30,409 --> 00:03:36,109
sort of boundary some sort of area and

76
00:03:33,500 --> 00:03:39,860
heading off into interstellar space and

77
00:03:36,110 --> 00:03:42,080
now reporter Maynard has reminded me

78
00:03:39,860 --> 00:03:44,420
that of course he spoke to Susan Dodd

79
00:03:42,080 --> 00:03:48,950
who is the project manager for Voyager

80
00:03:44,419 --> 00:03:51,109
and that was on episode 183 on the

81
00:03:48,949 --> 00:03:53,389
twenty first of April so it's worth

82
00:03:51,110 --> 00:03:56,360
three listening to if you have in mind

83
00:03:53,389 --> 00:03:58,699
to hear about this sort of space goings

84
00:03:56,360 --> 00:04:01,549
on of course we're all being am amazed

85
00:03:58,699 --> 00:04:03,319
by lovely gorgeous photographs coming

86

00:04:01,549 --> 00:04:05,780
back from the Curiosity rover at the

87
00:04:03,319 --> 00:04:07,370
moment now speaking briefly again as

88
00:04:05,780 --> 00:04:10,430
president of the Australian skeptics I

89
00:04:07,370 --> 00:04:12,289
hope you will join me sydneyiders for

90
00:04:10,430 --> 00:04:14,360
our dinner on the twenty-ninth of sep

91
00:04:12,289 --> 00:04:16,909
tember where we're going to be hearing

92
00:04:14,360 --> 00:04:20,780
from a Tory Shepherd punch columnist and

93
00:04:16,910 --> 00:04:22,669
chief reporter for news.com who gives a

94
00:04:20,779 --> 00:04:23,539
low-down on the media's embrace of the

95
00:04:22,668 --> 00:04:27,049
paranormal

96
00:04:23,540 --> 00:04:29,270
and the pseudo-scientific can't wait for

97
00:04:27,050 --> 00:04:31,310
that love the old skeptics dinners

98
00:04:29,269 --> 00:04:37,069
dinner talk so they're great evenings

99
00:04:31,310 --> 00:04:39,439
head to www.skype.com a you to book your

100
00:04:37,069 --> 00:04:42,230

ticket that's on the twenty-ninth of

101

00:04:39,439 --> 00:04:45,439

September and of course I hope you'll be

102

00:04:42,230 --> 00:04:48,230

joining me and James Randi and DJ Grothe

103

00:04:45,439 --> 00:04:50,980

and dr. Richie and rebecca watson and

104

00:04:48,230 --> 00:04:53,560

them and many many more people at the

105

00:04:50,980 --> 00:04:55,759

australian skeptics annual convention

106

00:04:53,560 --> 00:04:58,189

it's going to be in Melbourne at the end

107

00:04:55,759 --> 00:05:01,339

of november tickets are selling out fast

108

00:04:58,189 --> 00:05:03,740

don't miss this opportunity to meet lots

109

00:05:01,339 --> 00:05:06,799

of great people a chat with randy folks

110

00:05:03,740 --> 00:05:11,199

is is worth the price of admission alone

111

00:05:06,800 --> 00:05:13,520

believe me head to vic skeptics dot

112

00:05:11,199 --> 00:05:14,839

wordpress.com and find out more

113

00:05:13,519 --> 00:05:17,479

information about the australian

114

00:05:14,839 --> 00:05:20,719

skeptics National Convention and get

115
00:05:17,480 --> 00:05:23,660
your tickets soon folks get your tickets

116
00:05:20,720 --> 00:05:25,580
soon and now i'm going to ask for your

117
00:05:23,660 --> 00:05:28,310
help my dear listeners i'm going to ask

118
00:05:25,579 --> 00:05:30,069
for your help for some months now I've

119
00:05:28,310 --> 00:05:32,680
been slowly working on my new

120
00:05:30,069 --> 00:05:34,969
documentary the vaccination chronicles

121
00:05:32,680 --> 00:05:36,650
interviews with people and insights

122
00:05:34,970 --> 00:05:38,810
about the time before widespread

123
00:05:36,649 --> 00:05:41,629
vaccination what it was really like to

124
00:05:38,810 --> 00:05:43,459
see people suffering from these terrible

125
00:05:41,629 --> 00:05:47,709
diseases like polio and whooping cough

126
00:05:43,459 --> 00:05:50,539
measles things like this well I've

127
00:05:47,709 --> 00:05:52,789
really got into this documentary and

128
00:05:50,540 --> 00:05:54,439
having a very enjoyable time doing it as

129
00:05:52,790 --> 00:05:57,290
much as one can with a subject matter of

130
00:05:54,439 --> 00:05:59,029
course but I do need your help because

131
00:05:57,290 --> 00:06:02,480
in order to finish the documentary I

132
00:05:59,029 --> 00:06:05,479
have to upgrade my editing software

133
00:06:02,480 --> 00:06:07,670
because now I'm filming in HD now it's

134
00:06:05,480 --> 00:06:10,490
easy to film in HD of course anyone with

135
00:06:07,670 --> 00:06:12,949
an iphone can film in HD but it's doing

136
00:06:10,490 --> 00:06:16,519
all the processing the editing because I

137
00:06:12,949 --> 00:06:18,589
am and some of you may know I am also a

138
00:06:16,519 --> 00:06:20,810
professional video editor I've been

139
00:06:18,589 --> 00:06:22,669
doing it for many years but now I've hit

140
00:06:20,810 --> 00:06:25,790
a bump because I have to upgrade my

141
00:06:22,670 --> 00:06:30,470
software and here's a message for adobe

142
00:06:25,790 --> 00:06:33,710
i love using adobe premiere but it costs

143

00:06:30,470 --> 00:06:35,720
over twelve hundred dollars to download

144
00:06:33,709 --> 00:06:38,000
in Australia while I can buy

145
00:06:35,720 --> 00:06:39,580
it in a store in the United States for

146
00:06:38,000 --> 00:06:43,610
around six or seven hundred dollars

147
00:06:39,579 --> 00:06:47,269
hello so I've set up a thermometer on

148
00:06:43,610 --> 00:06:50,420
the skeptics own home page [www skeptics](http://www.skeptics)

149
00:06:47,269 --> 00:06:52,399
on TV you might remember there used to

150
00:06:50,420 --> 00:06:55,670
be one therefore may nod for Maynard's

151
00:06:52,399 --> 00:06:57,859
trip to Vegas well that worked very

152
00:06:55,670 --> 00:07:00,470
modest the Marbella folks just six

153
00:06:57,860 --> 00:07:02,720
hundred dollars that's all I need that's

154
00:07:00,470 --> 00:07:04,630
that's the shortfall there is for this

155
00:07:02,720 --> 00:07:07,400
project is only six hundred dollars

156
00:07:04,629 --> 00:07:09,230
please feel free to chip in I'd be very

157
00:07:07,399 --> 00:07:14,359

grateful if you do and I can finish this

158

00:07:09,230 --> 00:07:16,040

video off in HD I think I've bombarded

159

00:07:14,360 --> 00:07:18,470

you with enough and use and information

160

00:07:16,040 --> 00:07:21,830

and goes on and everything else I'm

161

00:07:18,470 --> 00:07:23,600

going to run down stairs carefully

162

00:07:21,829 --> 00:07:26,810

always have to be careful on the steps

163

00:07:23,600 --> 00:07:29,840

I'm going to go up to the cupboard above

164

00:07:26,810 --> 00:07:33,220

the fridge to get that pancake mix oh

165

00:07:29,839 --> 00:07:36,709

yes pancake mix mix up my yourself some

166

00:07:33,220 --> 00:07:38,419

lovely fluffy pancakes some butter on

167

00:07:36,709 --> 00:07:41,569

the top and maple syrup how about that

168

00:07:38,418 --> 00:07:44,199

well I do that i hope you enjoying the

169

00:07:41,569 --> 00:07:44,199

skeptic zone

170

00:07:57,490 --> 00:08:04,918

here's my not spooky action at the

171

00:08:02,410 --> 00:08:04,919

distance

172
00:08:05,610 --> 00:08:09,970
now one of the main reasons anyone would

173
00:08:08,439 --> 00:08:12,310
ever come to America would be to meet

174
00:08:09,970 --> 00:08:14,620
Brian Dunning and that's the bell of

175
00:08:12,310 --> 00:08:18,519
discovery Brian Dunning welcomed me to

176
00:08:14,620 --> 00:08:20,288
America welcome to America it's obscene

177
00:08:18,519 --> 00:08:21,908
a lot of it on television I've lost seen

178
00:08:20,288 --> 00:08:24,728
you Americans in movies but you're all

179
00:08:21,908 --> 00:08:27,098
very different up close well we don't we

180
00:08:24,728 --> 00:08:28,628
don't have quite the same gun that John

181
00:08:27,098 --> 00:08:30,579
Wayne carried some of us carry different

182
00:08:28,629 --> 00:08:32,560
models and and not all of us can afford

183
00:08:30,579 --> 00:08:34,750
horses some of us have to ride cows now

184
00:08:32,559 --> 00:08:36,578
what area from the Orange County woody

185
00:08:34,750 --> 00:08:38,288
where you from you know I thought I saw

186
00:08:36,578 --> 00:08:41,408
you on the real wives of orange county

187
00:08:38,288 --> 00:08:43,360
as a cab driver sadly I am right in that

188
00:08:41,408 --> 00:08:46,539
area I'm at Orange County California

189
00:08:43,360 --> 00:08:48,459
about halfway between LA and and San

190
00:08:46,539 --> 00:08:51,009
Diego beautiful beach community whales

191
00:08:48,458 --> 00:08:52,539
dolphins all that Sun it was Philly a

192
00:08:51,009 --> 00:08:54,100
liberal democrat area what kind of

193
00:08:52,539 --> 00:08:56,799
politics is it plays in that area oh

194
00:08:54,100 --> 00:08:58,269
it's it is it is very conservative oh

195
00:08:56,799 --> 00:09:00,009
really yeah we've got we've got like a

196
00:08:58,269 --> 00:09:03,190
couple little surf spots on the beach

197
00:09:00,009 --> 00:09:04,778
you got Laguna Beach and some pockets of

198
00:09:03,190 --> 00:09:06,700
artsy communities that are very liberal

199
00:09:04,778 --> 00:09:09,399
but by and large orange county is known

200

00:09:06,700 --> 00:09:11,829
for the it's one of the conservative

201
00:09:09,399 --> 00:09:13,240
spots of California so is there any

202
00:09:11,828 --> 00:09:15,278
skeptical issue that goes on in that

203
00:09:13,240 --> 00:09:17,860
area that you're aware of is it a big an

204
00:09:15,278 --> 00:09:21,399
evac Syria for example no I wouldn't say

205
00:09:17,860 --> 00:09:24,419
it's that but it's it's it's like much

206
00:09:21,399 --> 00:09:27,700
of California it's all the New Age whoa

207
00:09:24,419 --> 00:09:30,639
food woo is is very popular and buy food

208
00:09:27,700 --> 00:09:32,470
whew i mean people saying that certain

209
00:09:30,639 --> 00:09:34,990
super foods i love that expression a

210
00:09:32,470 --> 00:09:36,879
superfood yeah super foods organic food

211
00:09:34,990 --> 00:09:39,070
things that are miraculously healthy and

212
00:09:36,879 --> 00:09:41,169
then evil corporate foods processed

213
00:09:39,070 --> 00:09:42,790
foods that will immediately kill you and

214
00:09:41,169 --> 00:09:44,679

of course there's no evidence for either

215

00:09:42,789 --> 00:09:46,750

one of these but nevertheless it remains

216

00:09:44,679 --> 00:09:49,028

a very popular topic because you're the

217

00:09:46,750 --> 00:09:51,429

host and the producer abbr sceptile the

218

00:09:49,028 --> 00:09:53,948

weekly podcast and you've done all these

219

00:09:51,429 --> 00:09:55,629

episodes almost 300 you've only just got

220

00:09:53,948 --> 00:09:56,889

round to the Loch Ness monster what you

221

00:09:55,629 --> 00:09:58,240

been doing you mean you've been smoking

222

00:09:56,889 --> 00:10:00,338

something how come you didn't get do

223

00:09:58,240 --> 00:10:01,480

that on the first episode yeah a lot of

224

00:10:00,339 --> 00:10:03,310

people have asked me that yeah that I

225

00:10:01,480 --> 00:10:05,250

haven't done Bigfoot yet either I

226

00:10:03,309 --> 00:10:07,448

haven't done the JFK assassination

227

00:10:05,250 --> 00:10:09,549

there's a lot of standards I haven't

228

00:10:07,448 --> 00:10:12,849

gotten to simply because there are so

229
00:10:09,549 --> 00:10:15,189
many subjects out there a lot of them

230
00:10:12,850 --> 00:10:16,980
that people haven't heard of but that

231
00:10:15,190 --> 00:10:19,170
they still have just a really fun

232
00:10:16,980 --> 00:10:20,789
wonderful story behind them and

233
00:10:19,169 --> 00:10:22,559
that's one of the feedback I get most

234
00:10:20,789 --> 00:10:23,789
often is I'd never heard of this before

235
00:10:22,559 --> 00:10:25,138
and I thought it was going to be stupid

236
00:10:23,789 --> 00:10:28,409
but then I started listening and was

237
00:10:25,139 --> 00:10:29,850
fascinated now I've given you with the

238
00:10:28,409 --> 00:10:30,929
intersection with with the two of us

239
00:10:29,850 --> 00:10:32,519
when we met when you came to town

240
00:10:30,929 --> 00:10:34,588
Australia there's a couple of ideas I

241
00:10:32,519 --> 00:10:36,389
thrown your way there was the the Nazi

242
00:10:34,589 --> 00:10:39,329
UFO one which is a very interesting one

243
00:10:36,389 --> 00:10:40,379
and the Vril and and westall 66 you had

244
00:10:39,328 --> 00:10:42,599
a look at that in fact you're one of the

245
00:10:40,379 --> 00:10:44,039
few skeptical people that had a look at

246
00:10:42,600 --> 00:10:45,389
that and you raised the idea that it

247
00:10:44,039 --> 00:10:48,539
could have been an experimental drone at

248
00:10:45,389 --> 00:10:50,129
the time yeah what and actually I didn't

249
00:10:48,539 --> 00:10:52,289
raise the idea but i just found in one

250
00:10:50,129 --> 00:10:54,899
particular newspaper article that after

251
00:10:52,289 --> 00:10:56,490
it had come out someone had written in a

252
00:10:54,899 --> 00:10:59,549
letter to the editor and say hey i was

253
00:10:56,490 --> 00:11:02,070
stationed at Moorabbin airport is that

254
00:10:59,549 --> 00:11:03,500
isn't revenue ok apparently there have

255
00:11:02,070 --> 00:11:08,278
been some i'm not sure we call it the

256
00:11:03,500 --> 00:11:09,149
RAAF of the audible a reserve base or

257

00:11:08,278 --> 00:11:11,370
something and one of the things that

258
00:11:09,149 --> 00:11:14,220
they used to do there at the time in

259
00:11:11,370 --> 00:11:16,169
1966 was they would train pilots by

260
00:11:14,220 --> 00:11:18,000
having them chase a target drogue and

261
00:11:16,169 --> 00:11:19,799
the target drogue is just basically like

262
00:11:18,000 --> 00:11:22,110
a big giant wind sock that's towed

263
00:11:19,799 --> 00:11:24,958
behind another plane and other planes

264
00:11:22,110 --> 00:11:28,079
would chase that around and it turned

265
00:11:24,958 --> 00:11:30,509
out to be virtually a word for word

266
00:11:28,078 --> 00:11:33,269
description of what the science teacher

267
00:11:30,509 --> 00:11:34,889
who witnessed this said that he saw in

268
00:11:33,269 --> 00:11:36,328
the sky okay well that that's one

269
00:11:34,889 --> 00:11:38,069
possibility that's been raised that

270
00:11:36,328 --> 00:11:40,528
hasn't been mentioned as much as other

271
00:11:38,070 --> 00:11:42,180

possibilities yes certainly not know and

272

00:11:40,528 --> 00:11:45,509

it's everyone's gone with the math

273

00:11:42,179 --> 00:11:47,549

solution ation theory yeah I don't I

274

00:11:45,509 --> 00:11:50,549

don't buy the mass hallucination theory

275

00:11:47,549 --> 00:11:52,439

although typically what we always see in

276

00:11:50,549 --> 00:11:53,789

almost all well publicized cases is that

277

00:11:52,440 --> 00:11:55,560

a lot of people going to come out of the

278

00:11:53,789 --> 00:11:57,240

woodwork afterwards and it's the

279

00:11:55,559 --> 00:11:59,159

bandwagon effect everyone else saw

280

00:11:57,240 --> 00:12:01,079

something you tend to think you saw

281

00:11:59,159 --> 00:12:02,370

something two or you even lie about it

282

00:12:01,078 --> 00:12:03,870

and say oh yeah I don't want to be the

283

00:12:02,370 --> 00:12:06,000

only one who didn't see anything so yeah

284

00:12:03,870 --> 00:12:07,740

I saw something as well and what's the

285

00:12:06,000 --> 00:12:09,480

episode you've done that's really got

286
00:12:07,740 --> 00:12:12,389
the most flak and the most negative

287
00:12:09,480 --> 00:12:13,800
result from people it that always comes

288
00:12:12,389 --> 00:12:15,568
to when you when you're looking at a

289
00:12:13,799 --> 00:12:21,208
particular science that has political

290
00:12:15,568 --> 00:12:23,519
ramifications I I did one on DDT the the

291
00:12:21,208 --> 00:12:26,219
pesticide that is used a lot I mean that

292
00:12:23,519 --> 00:12:27,959
DDT created the Panama Canal for example

293
00:12:26,220 --> 00:12:30,959
that's what kept the workers alive and

294
00:12:27,958 --> 00:12:33,328
it's used now in places like Africa and

295
00:12:30,958 --> 00:12:35,178
India where we still have

296
00:12:33,328 --> 00:12:40,738
very severe problems with malaria

297
00:12:35,178 --> 00:12:43,139
however a lot of people strongly dislike

298
00:12:40,739 --> 00:12:45,540
the use of DDT it does definitely have

299
00:12:43,139 --> 00:12:48,509
environmental impacts it has been shown

300
00:12:45,539 --> 00:12:50,159
to be strongly correlated with eggshell

301
00:12:48,509 --> 00:12:53,129
thinning there's no doubt that it's a

302
00:12:50,159 --> 00:12:55,259
very imperfect insecticide and we have

303
00:12:53,129 --> 00:12:57,449
better insecticides now the thing with

304
00:12:55,259 --> 00:13:00,899
DDT is it's just incredibly inexpensive

305
00:12:57,448 --> 00:13:03,568
and when children are dying you know

306
00:13:00,899 --> 00:13:05,759
sometimes you got to say well we have to

307
00:13:03,568 --> 00:13:07,259
decide between how many bird shell eggs

308
00:13:05,759 --> 00:13:09,899
do we want thinned and how many kids do

309
00:13:07,259 --> 00:13:11,789
we want to decide and my conclusion on

310
00:13:09,899 --> 00:13:14,489
that was that I felt the existing bands

311
00:13:11,789 --> 00:13:17,368
were just about appropriate and that

312
00:13:14,489 --> 00:13:18,989
drew a huge amount of Eire from largely

313
00:13:17,369 --> 00:13:22,649
from the people who oppose the use of

314

00:13:18,989 --> 00:13:24,600
DDT and when you make a mistake or even

315
00:13:22,649 --> 00:13:26,789
look like it made a mistake they aren't

316
00:13:24,600 --> 00:13:30,319
backward in coming forward are they the

317
00:13:26,789 --> 00:13:33,298
people with the emails i know it when i

318
00:13:30,318 --> 00:13:34,979
try to i'm going to make mistakes all

319
00:13:33,298 --> 00:13:37,350
the time and i try to correct them

320
00:13:34,980 --> 00:13:38,819
whenever i do i usually go back and

321
00:13:37,350 --> 00:13:41,100
correct the transcript on the website

322
00:13:38,818 --> 00:13:42,808
and every so often maybe every 3-4

323
00:13:41,100 --> 00:13:44,970
months or so i will put out an episode

324
00:13:42,808 --> 00:13:47,488
that's exclusively dedicated to

325
00:13:44,970 --> 00:13:49,559
Corrections and arata and Boo Boo's and

326
00:13:47,489 --> 00:13:50,970
blunders and so forth and I think I

327
00:13:49,558 --> 00:13:53,188
think people really enjoy those because

328
00:13:50,970 --> 00:13:54,509

they're just as interesting and what do

329

00:13:53,188 --> 00:13:56,698

you thought as being the mood here at

330

00:13:54,509 --> 00:13:59,399

ten this year 2012 is it had a special

331

00:13:56,698 --> 00:14:01,109

feel to it as my first one I have no

332

00:13:59,399 --> 00:14:02,909

idea what has been the theme this year

333

00:14:01,110 --> 00:14:04,889

what has been the feeling you know

334

00:14:02,909 --> 00:14:06,778

there's so many first-time attendees

335

00:14:04,889 --> 00:14:08,909

here I've seen they have these first

336

00:14:06,778 --> 00:14:10,259

tammer badges for which I'm wearing

337

00:14:08,909 --> 00:14:11,850

you're wearing one right now I've seen

338

00:14:10,259 --> 00:14:14,399

more of those than I have at any at any

339

00:14:11,850 --> 00:14:16,379

previous event which is great and a lot

340

00:14:14,399 --> 00:14:17,489

of people are coming by my table I've

341

00:14:16,379 --> 00:14:19,230

got a table here where we're selling

342

00:14:17,489 --> 00:14:22,559

this cap tied books and DVDs and so

343
00:14:19,230 --> 00:14:25,168
forth and everyone is expressing pretty

344
00:14:22,558 --> 00:14:26,730
much universally positive feedback i

345
00:14:25,168 --> 00:14:28,078
think it's i think it's a it's a great

346
00:14:26,730 --> 00:14:29,938
show where we don't have some of the big

347
00:14:28,078 --> 00:14:32,099
headlining names this year Adam Savage

348
00:14:29,938 --> 00:14:35,009
and in we had a conflict with comic-con

349
00:14:32,100 --> 00:14:37,470
for example in his case so we've got a

350
00:14:35,009 --> 00:14:39,298
lot of new speakers and a lot of new

351
00:14:37,470 --> 00:14:41,850
attendees it's it's really been kind of

352
00:14:39,298 --> 00:14:44,159
like turning a fresh page and sort of a

353
00:14:41,850 --> 00:14:45,720
rebooting the conference anew now now

354
00:14:44,159 --> 00:14:47,370
Bryan something that

355
00:14:45,720 --> 00:14:49,139
it's a bit puzzling to me because to me

356
00:14:47,370 --> 00:14:50,610
america is the land of the middle man

357
00:14:49,139 --> 00:14:52,680
you can always sell your idea to someone

358
00:14:50,610 --> 00:14:54,329
who can sell you idea to someone your

359
00:14:52,679 --> 00:14:56,219
show to me seems like a something could

360
00:14:54,328 --> 00:14:57,688
be commercially saleable George Arab

361
00:14:56,220 --> 00:14:59,610
seems like someone who is commercially

362
00:14:57,688 --> 00:15:01,708
saleable SGU seems like something that

363
00:14:59,610 --> 00:15:03,899
is commercially saleable yet they're not

364
00:15:01,708 --> 00:15:05,789
on mainstream radio why can't these

365
00:15:03,899 --> 00:15:09,149
things be gotten on even in a small

366
00:15:05,789 --> 00:15:12,179
syndicated fashion in the US that's

367
00:15:09,149 --> 00:15:15,389
that's a great question I think the

368
00:15:12,179 --> 00:15:16,888
example that I use and I don't know if

369
00:15:15,389 --> 00:15:18,750
I'm you I may be using an example that's

370
00:15:16,889 --> 00:15:20,250
known to Americans and not Australians

371

00:15:18,750 --> 00:15:24,089
but there's a TV show here called the

372
00:15:20,250 --> 00:15:26,278
view yeah and we have a copy of that in

373
00:15:24,089 --> 00:15:27,810
strata called the circle okay so we've

374
00:15:26,278 --> 00:15:29,669
got five women sitting on the couch it's

375
00:15:27,809 --> 00:15:32,159
like it's on daytime television one of

376
00:15:29,669 --> 00:15:35,250
the women's channels and they argue

377
00:15:32,159 --> 00:15:37,469
about current events and stuff and if

378
00:15:35,250 --> 00:15:39,600
you ask anyone named a subject that you

379
00:15:37,470 --> 00:15:42,000
heard on the view nobody can think of

380
00:15:39,600 --> 00:15:43,860
one so what happens on the view it was

381
00:15:42,000 --> 00:15:45,059
it was mainly all arguments and

382
00:15:43,860 --> 00:15:46,919
fireworks between two of the

383
00:15:45,059 --> 00:15:48,809
personalities one very conservative girl

384
00:15:46,919 --> 00:15:50,250
and then Whoopi Goldberg Brett was in

385
00:15:48,809 --> 00:15:52,018

the very liberal perspective and they

386

00:15:50,250 --> 00:15:53,759

would just hash it out and and it makes

387

00:15:52,019 --> 00:15:57,028

great entertainment because it's its

388

00:15:53,759 --> 00:16:00,110

conflict that is so different from what

389

00:15:57,028 --> 00:16:02,490

what I'm doing on skep tide certainly

390

00:16:00,110 --> 00:16:04,230

skeptics guide of the universe has had

391

00:16:02,490 --> 00:16:06,750

some some conflict especially when they

392

00:16:04,230 --> 00:16:08,759

had their previous hosts Perry who

393

00:16:06,750 --> 00:16:10,500

unfortunately is no longer with us but

394

00:16:08,759 --> 00:16:11,938

he used to get into some great arguments

395

00:16:10,500 --> 00:16:13,919

and it make great entertainment so I

396

00:16:11,938 --> 00:16:17,088

think it's just a matter of finding the

397

00:16:13,919 --> 00:16:21,208

right personalities and presenting this

398

00:16:17,089 --> 00:16:23,279

fascinating information in in just a or

399

00:16:21,208 --> 00:16:25,349

commercial format do you think it's part

400
00:16:23,278 --> 00:16:26,549
of the the fact that these commercial

401
00:16:25,350 --> 00:16:28,680
entities haven't woken up to the fact

402
00:16:26,549 --> 00:16:30,659
that there is an audience for this even

403
00:16:28,679 --> 00:16:32,099
in a limited way and they've got to work

404
00:16:30,659 --> 00:16:33,480
harder to find it where if they get

405
00:16:32,100 --> 00:16:36,240
given something it's a bit junkie they

406
00:16:33,480 --> 00:16:37,889
can just throw it on Illi don't agree

407
00:16:36,240 --> 00:16:40,528
that that there is an audience out there

408
00:16:37,889 --> 00:16:43,350
that's not being addressed I think that

409
00:16:40,528 --> 00:16:45,870
all audiences respond to sensational

410
00:16:43,350 --> 00:16:48,240
programming and the problem is that it's

411
00:16:45,870 --> 00:16:51,058
just really easy to make up crap and

412
00:16:48,240 --> 00:16:54,120
have sensational programming and there's

413
00:16:51,058 --> 00:16:57,480
no real financial upside to putting in

414
00:16:54,120 --> 00:16:59,308
the extra work to make non crap equally

415
00:16:57,480 --> 00:16:59,860
sensational it can be done don't get me

416
00:16:59,308 --> 00:17:01,299
wrong I'm can

417
00:16:59,860 --> 00:17:03,070
vincit it can be none i'm happy to step

418
00:17:01,299 --> 00:17:06,308
up and do it someone just needs to try

419
00:17:03,070 --> 00:17:07,660
to check you've made a couple of pilots

420
00:17:06,308 --> 00:17:09,459
in your time and you've put it forward

421
00:17:07,660 --> 00:17:12,100
and all that kind of thing and what's a

422
00:17:09,459 --> 00:17:13,750
feedback do you normally get to do they

423
00:17:12,099 --> 00:17:15,338
actually say or we think this is a bit

424
00:17:13,750 --> 00:17:17,439
too arrow diet for the audience they

425
00:17:15,338 --> 00:17:20,169
actually use those kind of words yes

426
00:17:17,439 --> 00:17:21,640
very much in fact we're they're not

427
00:17:20,170 --> 00:17:24,308
scared to tell you you're just being too

428

00:17:21,640 --> 00:17:25,569
smart mate no I mean they they want the

429
00:17:24,308 --> 00:17:27,970
shows that they want and they're happy

430
00:17:25,568 --> 00:17:30,308
to tell you exactly what they want they

431
00:17:27,970 --> 00:17:31,960
told us that we've won pilot that we

432
00:17:30,308 --> 00:17:34,599
made call this kept ologist where we had

433
00:17:31,960 --> 00:17:36,308
a team of expert PhDs and everything we

434
00:17:34,599 --> 00:17:39,069
would go out to the scene and debunk the

435
00:17:36,308 --> 00:17:40,480
pseudoscience and they told us straight

436
00:17:39,069 --> 00:17:42,279
out the first thing we would do is fire

437
00:17:40,480 --> 00:17:43,569
your cast and hire a bunch of twenty

438
00:17:42,279 --> 00:17:46,690
something year old people who chase

439
00:17:43,569 --> 00:17:48,069
ghosts and when we told them hey the

440
00:17:46,690 --> 00:17:49,570
selling point is that these people know

441
00:17:48,069 --> 00:17:51,189
what they're talking about that's really

442
00:17:49,569 --> 00:17:53,470

good information they couldn't care less

443

00:17:51,190 --> 00:17:54,580

they want sensational information they

444

00:17:53,470 --> 00:17:56,529

don't care whether the people know what

445

00:17:54,579 --> 00:17:58,480

they're talking about or not so how do

446

00:17:56,529 --> 00:17:59,859

you select a topic for skip to it each

447

00:17:58,480 --> 00:18:01,509

week you said there's always so many to

448

00:17:59,859 --> 00:18:02,889

choose from you're not going with

449

00:18:01,509 --> 00:18:04,808

sensationalism you're going with

450

00:18:02,890 --> 00:18:06,600

topicality sometimes but how do you make

451

00:18:04,808 --> 00:18:08,710

your selection it's just something

452

00:18:06,599 --> 00:18:10,899

people send them to me first of all so I

453

00:18:08,710 --> 00:18:12,940

always have a massive list of ideas to

454

00:18:10,900 --> 00:18:16,150

go through and it's just something that

455

00:18:12,940 --> 00:18:18,519

whatever whatever pics my might not my

456

00:18:16,150 --> 00:18:24,120

funny bone my skeptical bone but what

457
00:18:18,519 --> 00:18:26,349
just that what Oh me use language

458
00:18:24,119 --> 00:18:28,119
whatever gets me excited because it

459
00:18:26,349 --> 00:18:30,308
seems like an interesting topic to

460
00:18:28,119 --> 00:18:31,359
research because I so many of them

461
00:18:30,308 --> 00:18:32,558
fascinating the one that's what I'm

462
00:18:31,359 --> 00:18:34,329
working on right now is there's a bridge

463
00:18:32,558 --> 00:18:36,160
in Scotland where dogs have been

464
00:18:34,329 --> 00:18:38,379
committing suicide jumping off the

465
00:18:36,160 --> 00:18:39,910
bridge now on the one hand there's not

466
00:18:38,380 --> 00:18:40,990
too much to say about that but on the

467
00:18:39,910 --> 00:18:42,970
other hand as well there's gotta be

468
00:18:40,990 --> 00:18:45,789
something going on there how do we find

469
00:18:42,970 --> 00:18:47,679
out what it is why do people believe

470
00:18:45,789 --> 00:18:49,659
that there's this legend does the legend

471
00:18:47,679 --> 00:18:52,509
actually exist has this actually been

472
00:18:49,660 --> 00:18:54,370
going on and if so what's the cause so

473
00:18:52,509 --> 00:18:56,200
there actually is a lot to talk about of

474
00:18:54,369 --> 00:18:57,879
all the phenomena of phenomena

475
00:18:56,200 --> 00:19:00,220
phenomenon you looked at over the years

476
00:18:57,880 --> 00:19:02,049
on skip tide which is always it's a

477
00:19:00,220 --> 00:19:03,789
great listen because I always as I leave

478
00:19:02,048 --> 00:19:05,079
work as I'm driving on the f3 from

479
00:19:03,789 --> 00:19:06,849
Newcastle to Sydney that's how I usually

480
00:19:05,079 --> 00:19:08,409
have a listen to it it's almost like my

481
00:19:06,849 --> 00:19:10,808
working weeks over it's a good little

482
00:19:08,410 --> 00:19:11,210
get into it then I get about 120 k and

483
00:19:10,808 --> 00:19:13,099
getting

484
00:19:11,210 --> 00:19:15,350
and there's no Brian's voice kind of a

485

00:19:13,099 --> 00:19:16,548
dangerous thing um what was like oh oh

486
00:19:15,349 --> 00:19:18,589
yeah well what has it been one thing

487
00:19:16,548 --> 00:19:20,808
you've looked at that you kinda wish was

488
00:19:18,589 --> 00:19:22,189
true of all the phenomena of all of all

489
00:19:20,808 --> 00:19:23,928
the ones you know and you know it could

490
00:19:22,190 --> 00:19:25,490
be true you just could be wrong but what

491
00:19:23,929 --> 00:19:28,190
is one of the things you go well that'd

492
00:19:25,490 --> 00:19:30,679
be great if it was true anything

493
00:19:28,190 --> 00:19:34,009
pertaining to what's essentially a human

494
00:19:30,679 --> 00:19:35,919
superpower anything like being the

495
00:19:34,009 --> 00:19:38,480
ability to read minds remote viewing

496
00:19:35,919 --> 00:19:41,210
being able to see things that with it

497
00:19:38,480 --> 00:19:42,919
with extrasensory perception even the

498
00:19:41,210 --> 00:19:44,750
stories you've heard where a car rolls

499
00:19:42,919 --> 00:19:46,100

over on top of someone and and the mom

500

00:19:44,750 --> 00:19:48,470

comes over and with superhuman strength

501

00:19:46,099 --> 00:19:50,269

lift up the car it turns out that

502

00:19:48,470 --> 00:19:52,190

there's a very limited amount of truth

503

00:19:50,269 --> 00:19:54,079

certainly not as much truth as that

504

00:19:52,190 --> 00:19:56,028

commonly believed all of these

505

00:19:54,079 --> 00:19:57,439

superpower type things we'd all love

506

00:19:56,028 --> 00:19:59,390

them to be true because we all wish we

507

00:19:57,440 --> 00:20:01,159

have superpowers and I think that's got

508

00:19:59,390 --> 00:20:03,200

a lot of the reason to do with why these

509

00:20:01,159 --> 00:20:05,510

beliefs are so are so popular with

510

00:20:03,200 --> 00:20:07,038

people now you've been to Australia you

511

00:20:05,509 --> 00:20:08,960

have good friend Richard Saunders and

512

00:20:07,038 --> 00:20:10,129

major Dunlop well how do you see the

513

00:20:08,960 --> 00:20:11,840

differences between the way the

514
00:20:10,130 --> 00:20:14,390
skepticism is approached in Australia

515
00:20:11,839 --> 00:20:16,519
and here in the US is a main difference

516
00:20:14,390 --> 00:20:19,549
you can spot the difference I can spot

517
00:20:16,519 --> 00:20:22,788
is that you guys have dr. Carl dr. Carl

518
00:20:19,548 --> 00:20:25,069
does so much for improving the public

519
00:20:22,788 --> 00:20:26,658
level of intelligence in Australia and

520
00:20:25,069 --> 00:20:29,480
the United States does not have the

521
00:20:26,659 --> 00:20:31,429
benefit of that I honestly give dr. Carl

522
00:20:29,480 --> 00:20:35,419
personally a lot of credit because I see

523
00:20:31,429 --> 00:20:37,700
a lot more per capita enthusiasm about

524
00:20:35,419 --> 00:20:39,110
science and skeptical thinking in

525
00:20:37,700 --> 00:20:40,909
Australia than I see in the United

526
00:20:39,109 --> 00:20:42,500
States you think it's cuz no one he

527
00:20:40,909 --> 00:20:44,419
wants to give someone a platform like

528
00:20:42,500 --> 00:20:46,880
that a national platform like the ABC is

529
00:20:44,419 --> 00:20:48,710
done with dr. Carl yeah i mean the u.s.

530
00:20:46,880 --> 00:20:52,370
is the head of cheap entertainment and

531
00:20:48,710 --> 00:20:54,528
cheap entertainment means just chasing

532
00:20:52,369 --> 00:20:58,278
ghosts so look out dr. Cal you got dr.

533
00:20:54,528 --> 00:21:00,259
oz yes we you know we her for a long

534
00:20:58,278 --> 00:21:03,528
time we had on the radio dr. Dean Adele

535
00:21:00,259 --> 00:21:06,288
and he was America's doctor and a great

536
00:21:03,528 --> 00:21:08,269
guy great skeptical analysis big

537
00:21:06,288 --> 00:21:10,190
opponent of alternative medicine and

538
00:21:08,269 --> 00:21:13,009
everything Dean Adele unfortunately

539
00:21:10,190 --> 00:21:15,080
retired and now America's doctor dr. oz

540
00:21:13,009 --> 00:21:17,269
and we have exactly the opposite a

541
00:21:15,079 --> 00:21:19,730
wholesale promoter of quackery and

542

00:21:17,269 --> 00:21:21,528
nonsense and I asked Michael Sherman a

543
00:21:19,730 --> 00:21:23,298
few other people recently have you found

544
00:21:21,528 --> 00:21:25,069
a great science website you've gone to

545
00:21:23,298 --> 00:21:26,509
recently obviously skipped or

546
00:21:25,069 --> 00:21:27,798
home is a place to go to get a lot of

547
00:21:26,509 --> 00:21:29,179
great information but is there a site

548
00:21:27,798 --> 00:21:30,500
you've been looking around the go wow

549
00:21:29,179 --> 00:21:33,769
it's a good one that you'd like to pick

550
00:21:30,500 --> 00:21:36,169
them in to us I I go to these websites

551
00:21:33,769 --> 00:21:38,028
all the time because i have i have

552
00:21:36,169 --> 00:21:40,370
interesting news stories that I put in

553
00:21:38,028 --> 00:21:42,380
my weekly email newsletter and I have a

554
00:21:40,369 --> 00:21:43,548
daily skep tied tweet that goes out on

555
00:21:42,380 --> 00:21:45,528
Twitter so I've got to come up with a

556
00:21:43,548 --> 00:21:48,259

lot of neat stuff and one of my

557

00:21:45,528 --> 00:21:49,609

favorites is New Scientist com I go

558

00:21:48,259 --> 00:21:53,058

there because they have a lot of good

559

00:21:49,609 --> 00:21:56,298

reporting on latest and greatest and of

560

00:21:53,058 --> 00:21:59,269

course scientificamerican.com popular

561

00:21:56,298 --> 00:22:00,740

site pops ID com saya mo what a

562

00:21:59,269 --> 00:22:03,200

scientific american i think it's i am

563

00:22:00,740 --> 00:22:05,450

calm and just so the people that have

564

00:22:03,200 --> 00:22:06,860

put in money to get me out here over

565

00:22:05,450 --> 00:22:07,909

this weekend could you just let them

566

00:22:06,859 --> 00:22:09,979

know that i have actually been working

567

00:22:07,909 --> 00:22:11,840

hard and have not been drinking with you

568

00:22:09,980 --> 00:22:12,740

at the bar every night well i will say

569

00:22:11,839 --> 00:22:14,528

this is the first time I've actually

570

00:22:12,740 --> 00:22:17,808

seen you at the conference this week

571
00:22:14,528 --> 00:22:19,128
that's not true of course no man is a

572
00:22:17,808 --> 00:22:20,898
great guy he's made a ton of friends

573
00:22:19,128 --> 00:22:22,668
here and and he's really quite one of

574
00:22:20,898 --> 00:22:24,408
the personalities of the conference but

575
00:22:22,669 --> 00:22:25,759
Brian great meeting you once again and I

576
00:22:24,409 --> 00:22:28,460
think it's your turn to come down under

577
00:22:25,759 --> 00:22:30,470
this time and I do mean the country I am

578
00:22:28,460 --> 00:22:33,759
there I am so there is no place I'd

579
00:22:30,470 --> 00:22:33,759
rather go next thank you for that

580
00:22:44,298 --> 00:22:50,160
hi this is Tim Farley you probably know

581
00:22:47,579 --> 00:22:52,949
me from what's the harm net a catalog of

582
00:22:50,160 --> 00:22:55,259
the real world harm caused by lack of

583
00:22:52,950 --> 00:22:58,410
critical thinking but that's not my only

584
00:22:55,259 --> 00:23:01,349
project i present at skeptic events I

585
00:22:58,410 --> 00:23:03,570
post a daily skeptic history fact on

586
00:23:01,349 --> 00:23:06,058
Twitter and Facebook and I blog about

587
00:23:03,569 --> 00:23:09,240
using new techniques on the internet to

588
00:23:06,058 --> 00:23:12,720
advance skepticism come over to skept

589
00:23:09,240 --> 00:23:15,808
tools.com and check out my latest ideas

590
00:23:12,720 --> 00:23:22,950
but first enjoy the rest of the skeptic

591
00:23:15,808 --> 00:23:27,379
zone now it's time for dr. Richie

592
00:23:22,950 --> 00:23:27,380
reports with dr. Rachel Dunlop

593
00:23:27,759 --> 00:23:32,808
hello listeners and welcome to dr.

594
00:23:30,288 --> 00:23:35,029
Richie reports this week I present to

595
00:23:32,808 --> 00:23:36,980
you another update on the regulation of

596
00:23:35,029 --> 00:23:39,589
alternative medicine and complementary

597
00:23:36,980 --> 00:23:41,480
medicine in Australia and the news at

598
00:23:39,589 --> 00:23:44,359
first seems good although the devil is

599

00:23:41,480 --> 00:23:46,490
in the detail so imagine if you were

600
00:23:44,359 --> 00:23:48,109
given a homework assignment one taking

601
00:23:46,490 --> 00:23:50,660
weeks to complete and potentially

602
00:23:48,109 --> 00:23:52,689
costing you a fair amount of money the

603
00:23:50,660 --> 00:23:55,009
project is also complex and convoluted

604
00:23:52,690 --> 00:23:57,350
meaning you'll probably need to get some

605
00:23:55,009 --> 00:23:59,480
help from other people but there's a

606
00:23:57,349 --> 00:24:01,699
catch even though the project is

607
00:23:59,480 --> 00:24:04,069
compulsory and you must take a box to

608
00:24:01,700 --> 00:24:06,529
say you've completed it you don't need

609
00:24:04,069 --> 00:24:07,908
to hand it in in addition the chance

610
00:24:06,529 --> 00:24:11,480
that your teacher will check that you've

611
00:24:07,909 --> 00:24:14,270
done it is about twenty percent so with

612
00:24:11,480 --> 00:24:16,099
all this in mind would you do it this

613
00:24:14,269 --> 00:24:17,990

would have been the situation facing

614

00:24:16,099 --> 00:24:19,788

manufacturers of complementary and

615

00:24:17,990 --> 00:24:21,048

alternative medicine wanting to get

616

00:24:19,788 --> 00:24:23,720

their drugs included on the official

617

00:24:21,048 --> 00:24:26,538

government list of drugs if the proposed

618

00:24:23,720 --> 00:24:28,579

changes were introduced under the

619

00:24:26,538 --> 00:24:30,529

current system to get cams such as

620

00:24:28,579 --> 00:24:32,389

supplements and ear candles stamped with

621

00:24:30,529 --> 00:24:35,928

an official-looking number called an

622

00:24:32,390 --> 00:24:37,580

austell you apply online select from a

623

00:24:35,929 --> 00:24:39,440

list of pre-approved ingredients

624

00:24:37,579 --> 00:24:41,480

indicate that you have evidence that

625

00:24:39,440 --> 00:24:43,610

your product is useful and sit back and

626

00:24:41,480 --> 00:24:45,919

wait for notification that you're on the

627

00:24:43,609 --> 00:24:47,928

list but what appears to be part of a

628
00:24:45,919 --> 00:24:50,000
larger crackdown on alternative medicine

629
00:24:47,929 --> 00:24:52,038
or rather was part of a larger crackdown

630
00:24:50,000 --> 00:24:54,619
on alternative medicine and i'll get to

631
00:24:52,038 --> 00:24:56,450
that further in a moment the Australian

632
00:24:54,619 --> 00:25:00,259
Government is proposing to significantly

633
00:24:56,450 --> 00:25:02,419
tighten up what constitutes evidence now

634
00:25:00,259 --> 00:25:04,400
listeners might recall recent moves by

635
00:25:02,419 --> 00:25:06,409
the government in Australia to remove 30

636
00:25:04,400 --> 00:25:09,380
million dollars in subsidies for cam

637
00:25:06,409 --> 00:25:11,179
from our public health system so this

638
00:25:09,380 --> 00:25:13,520
could potentially affect rebates for

639
00:25:11,179 --> 00:25:15,288
homeopathy aromatherapy ear candling

640
00:25:13,519 --> 00:25:17,629
crystal therapy flower essences

641
00:25:15,288 --> 00:25:20,029
iridology kinesiology and that tropi

642
00:25:17,630 --> 00:25:21,710
the-- professor Ken Harvey who was an

643
00:25:20,029 --> 00:25:24,649
outspoken advocate for evidence-based

644
00:25:21,710 --> 00:25:26,390
medicine welcome this move saying if

645
00:25:24,650 --> 00:25:28,429
there is no good evidence that they are

646
00:25:26,390 --> 00:25:30,799
better than a placebo then cam should

647
00:25:28,429 --> 00:25:33,860
not be funded by the taxpayer and of

648
00:25:30,798 --> 00:25:35,720
course I agree with this in addition

649
00:25:33,859 --> 00:25:38,359
following the findings by the UK

650
00:25:35,720 --> 00:25:40,720
government in 2010 that homeopathy was

651
00:25:38,359 --> 00:25:42,399
no more effective than placebo

652
00:25:40,720 --> 00:25:44,829
a draft statement from the Australian

653
00:25:42,400 --> 00:25:47,019
Government was leaked to stating that it

654
00:25:44,829 --> 00:25:48,759
was quote unethical for health

655
00:25:47,019 --> 00:25:50,769
practitioners to treat patients using

656

00:25:48,759 --> 00:25:53,230
homeopathy for the reason that

657
00:25:50,769 --> 00:25:56,048
homeopathy has not been shown to be

658
00:25:53,230 --> 00:25:58,150
efficacious now curiously homeopathy

659
00:25:56,048 --> 00:25:59,589
does not qualify for regulation by the

660
00:25:58,150 --> 00:26:02,019
Australian Government because in most

661
00:25:59,589 --> 00:26:06,668
cases the potions are considered to

662
00:26:02,019 --> 00:26:08,859
dilute to pose any risk to consumers so

663
00:26:06,669 --> 00:26:11,830
the proposed changes to the regulation

664
00:26:08,859 --> 00:26:14,379
of cam have the cam industry crying that

665
00:26:11,829 --> 00:26:17,408
the end is nigh and why would this be

666
00:26:14,380 --> 00:26:19,299
well because if this proposal that

667
00:26:17,409 --> 00:26:21,730
evidence must now come in the form of an

668
00:26:19,298 --> 00:26:23,589
expert report it would consist of a

669
00:26:21,730 --> 00:26:25,269
comprehensive analysis of all the

670
00:26:23,589 --> 00:26:27,819

scientific evidence for the product

671

00:26:25,269 --> 00:26:30,220
proposed going back at least 10 years

672

00:26:27,819 --> 00:26:33,369
and sourced from at least two different

673

00:26:30,220 --> 00:26:35,860
scientific databases the government has

674

00:26:33,369 --> 00:26:39,509
also indicated that not just any old

675

00:26:35,859 --> 00:26:42,069
studies would do citing meta analyses as

676

00:26:39,509 --> 00:26:43,629
able to produce the evidence that most

677

00:26:42,069 --> 00:26:44,980
closely reflects the health benefits

678

00:26:43,630 --> 00:26:48,250
associated with a particular

679

00:26:44,980 --> 00:26:50,230
intervention and additionally and

680

00:26:48,250 --> 00:26:52,150
importantly the studies presented as

681

00:26:50,230 --> 00:26:55,419
evidence must specifically support the

682

00:26:52,150 --> 00:26:57,250
claims of the product so the proposed

683

00:26:55,419 --> 00:26:59,830
document says that if the product claims

684

00:26:57,250 --> 00:27:01,929
to be effective at weight loss studies

685
00:26:59,829 --> 00:27:04,089
that described body reshaping or improve

686
00:27:01,929 --> 00:27:07,960
muscle mass are not acceptable as

687
00:27:04,089 --> 00:27:09,548
evidence so as you can imagine this task

688
00:27:07,960 --> 00:27:11,259
of putting together such an expert

689
00:27:09,548 --> 00:27:14,288
report is gargantuan and time-consuming

690
00:27:11,259 --> 00:27:15,700
and testament to this in the proposals

691
00:27:14,288 --> 00:27:17,408
put up by the government they

692
00:27:15,700 --> 00:27:19,240
recommended that applicants seek the

693
00:27:17,409 --> 00:27:22,330
assistance of a librarian to help in

694
00:27:19,240 --> 00:27:25,659
collating the expert report and that's

695
00:27:22,329 --> 00:27:28,658
not all the draft report even defines

696
00:27:25,659 --> 00:27:30,090
what constitutes an expert they must

697
00:27:28,659 --> 00:27:32,470
have either a specialist medical

698
00:27:30,089 --> 00:27:34,389
qualification or a tertiary degree of at

699
00:27:32,470 --> 00:27:36,730
least three years duration in a health

700
00:27:34,390 --> 00:27:39,210
profession they must also have completed

701
00:27:36,730 --> 00:27:41,370
either a course in critical appraisal or

702
00:27:39,210 --> 00:27:44,380
biostatistics from a tertiary

703
00:27:41,369 --> 00:27:46,359
institution or hold a PhD in a

704
00:27:44,380 --> 00:27:49,000
scientific or health-related discipline

705
00:27:46,359 --> 00:27:51,819
now that's a lot of letters after one's

706
00:27:49,000 --> 00:27:54,549
name and people with that many

707
00:27:51,819 --> 00:27:56,919
qualifications generally don't give that

708
00:27:54,549 --> 00:27:59,169
I'm for free at least not as much time

709
00:27:56,920 --> 00:28:02,050
as such a detailed report would require

710
00:27:59,170 --> 00:28:03,460
but here's the rub listeners if you're

711
00:28:02,049 --> 00:28:05,139
thinking what a great initiative from

712
00:28:03,460 --> 00:28:07,029
the government and what a significant

713

00:28:05,140 --> 00:28:08,920
step forward in the regulation of cam in

714
00:28:07,029 --> 00:28:10,990
Australia that may I remind you about

715
00:28:08,920 --> 00:28:13,180
the opening phrase of them report I

716
00:28:10,990 --> 00:28:15,339
described one of the major flaws in this

717
00:28:13,180 --> 00:28:17,259
otherwise genius legislation and that is

718
00:28:15,339 --> 00:28:18,909
that the expert report would not be

719
00:28:17,259 --> 00:28:23,289
required to be submitted with the

720
00:28:18,910 --> 00:28:24,850
application for a product so applicants

721
00:28:23,289 --> 00:28:26,049
would have to state that they had it

722
00:28:24,849 --> 00:28:27,939
that they'd done it that they'd

723
00:28:26,049 --> 00:28:30,509
completed it but they did not need to

724
00:28:27,940 --> 00:28:33,160
produce it unless they were audited and

725
00:28:30,509 --> 00:28:35,559
the chances of them being audited is

726
00:28:33,160 --> 00:28:37,180
only around twenty percent now since I

727
00:28:35,559 --> 00:28:38,679

wrote the report on this proposed

728

00:28:37,180 --> 00:28:41,259

legislation there have been even more

729

00:28:38,680 --> 00:28:43,810

recent updates and that update is that

730

00:28:41,259 --> 00:28:46,240

because the cam industry was so incensed

731

00:28:43,809 --> 00:28:48,129

by the possibility of having to present

732

00:28:46,240 --> 00:28:50,230

evidence of efficacy for their products

733

00:28:48,130 --> 00:28:52,510

they jumped up and down and the

734

00:28:50,230 --> 00:28:54,549

government decided to cancel this idea

735

00:28:52,509 --> 00:28:56,740

so what looks to be a really great step

736

00:28:54,549 --> 00:28:59,169

forward in tightening up the regulation

737

00:28:56,740 --> 00:29:02,680

of cam in Australia has come to nothing

738

00:28:59,170 --> 00:29:05,640

and until next time this has been dr.

739

00:29:02,680 --> 00:29:05,640

Rachel reports

740

00:29:06,599 --> 00:29:12,189

dr. Rachel Dunlop is one of Australia's

741

00:29:09,430 --> 00:29:13,590

foremost media commentators in matters

742
00:29:12,190 --> 00:29:16,150
concerning so-called alternative

743
00:29:13,589 --> 00:29:19,959
medicine she has appeared on national

744
00:29:16,150 --> 00:29:22,240
radio and national television dr. H E is

745
00:29:19,960 --> 00:29:26,200
available for interviews and you can

746
00:29:22,240 --> 00:29:29,579
contact her at Rachel at skeptic zone

747
00:29:26,200 --> 00:29:29,580
got TV

748
00:29:40,848 --> 00:29:45,598
hi I'm on it oh yeah Chris 10 Aviva tips

749
00:29:44,098 --> 00:29:47,908
that I so emotional eater of a skeptic

750
00:29:45,598 --> 00:29:50,098
zone I'm skeptical in la liga the VINs

751
00:29:47,909 --> 00:29:51,959
not reblog gear or pivot f a podcast of

752
00:29:50,098 --> 00:29:54,628
reading and skip sistemas leaks in this

753
00:29:51,959 --> 00:29:55,859
drama central to our skip crystal demo or

754
00:29:54,628 --> 00:29:58,108
higher publicize the deeps con

755
00:29:55,858 --> 00:29:59,788
articulate and calendar / activity or

756
00:29:58,108 --> 00:30:01,588
link eternity research it skips this

757
00:29:59,788 --> 00:30:03,209
blog in up to 30m late autodesk ateres

758
00:30:01,588 --> 00:30:07,338
hefty performance so stick Kingdom or

759
00:30:03,209 --> 00:30:07,339
Delta do awesome escapes is totes hello

760
00:30:18,739 --> 00:30:23,909
Eugenie Scott is one of my very favorite

761
00:30:21,088 --> 00:30:28,108
people although we have our civilized

762
00:30:23,909 --> 00:30:30,389
disagreements as I hotel in the battle

763
00:30:28,108 --> 00:30:33,358
for rationality in America especially in

764
00:30:30,388 --> 00:30:35,308
American education my own subject of

765
00:30:33,358 --> 00:30:38,368
evolutionary biology is in the front

766
00:30:35,308 --> 00:30:40,229
blind trench and dr. Scott is the

767
00:30:38,368 --> 00:30:42,569
commanding officer the master strategist

768
00:30:40,229 --> 00:30:44,940
on our side the general in charge of

769
00:30:42,569 --> 00:30:47,158
intelligence and strategic planning as

770

00:30:44,940 --> 00:30:50,519
well as the field officer in charge of

771
00:30:47,159 --> 00:30:53,129
tactics and battle order yet she does it

772
00:30:50,519 --> 00:30:56,098
all with the most unmilitary grace and

773
00:30:53,128 --> 00:30:57,538
charm it's impossible to meet Jeanne

774
00:30:56,098 --> 00:31:01,019
without loving her whether you agree

775
00:30:57,538 --> 00:31:02,578
with her or not not surprisingly her

776
00:31:01,019 --> 00:31:05,459
distinction has been recognized with

777
00:31:02,578 --> 00:31:11,190
numerous honorary degrees and and other

778
00:31:05,459 --> 00:31:13,589
honest too many to list of course no one

779
00:31:11,190 --> 00:31:15,450
person could achieve so much on her own

780
00:31:13,588 --> 00:31:17,548
the mother of Jeannie's great strengths

781
00:31:15,450 --> 00:31:20,308
is that she's a team player as well as a

782
00:31:17,548 --> 00:31:23,608
leader she's built up the National

783
00:31:20,308 --> 00:31:25,618
Center for Science Education NCSE so

784
00:31:23,608 --> 00:31:29,519

that it's now a formidable combination

785

00:31:25,618 --> 00:31:32,428
of think tank and commando unit of shock

786

00:31:29,519 --> 00:31:34,588
troops I was made to feel very welcome

787

00:31:32,429 --> 00:31:36,329
and I visited them in their offices in

788

00:31:34,588 --> 00:31:38,729
California a couple of years ago and

789

00:31:36,328 --> 00:31:41,700
were privileged to sit in as a guest in

790

00:31:38,729 --> 00:31:42,959
one of the weekly brainstorming meetings

791

00:31:41,700 --> 00:31:46,519
chaired with humor and good fellowship

792

00:31:42,959 --> 00:31:49,318
by Jeanne there's a delightful air of

793

00:31:46,519 --> 00:31:52,589
informal competence you get the feeling

794

00:31:49,318 --> 00:31:54,359
they're not a wash with money unlike the

795

00:31:52,589 --> 00:31:57,750
ludicrously ill named Discovery

796

00:31:54,359 --> 00:31:59,609
Institute but the NCSE is very much a

797

00:31:57,750 --> 00:32:03,150
wash with ability intelligence

798

00:31:59,609 --> 00:32:05,308
initiative loyalty of drive and the

799

00:32:03,150 --> 00:32:07,830
inspiration for that kind of excellence

800

00:32:05,308 --> 00:32:11,759
comes from the top from Eugenie Scott

801

00:32:07,829 --> 00:32:13,829
herself I said we have our civilized

802

00:32:11,759 --> 00:32:16,740
disagreements and she wouldn't wish me

803

00:32:13,829 --> 00:32:19,439
to duck the issue I think she's soft on

804

00:32:16,740 --> 00:32:21,480
religion she is of course not religious

805

00:32:19,440 --> 00:32:23,009
herself though she'll hate me for saying

806

00:32:21,480 --> 00:32:25,769
it she's too intelligent and

807

00:32:23,009 --> 00:32:28,408
well-informed to be religious but she

808

00:32:25,769 --> 00:32:32,009
respects religion in a way that i do not

809

00:32:28,409 --> 00:32:34,200
i can imagine good tactical reasons for

810

00:32:32,009 --> 00:32:35,490
pretending to respect religion the same

811

00:32:34,200 --> 00:32:37,500
reason that i like to think lead

812

00:32:35,490 --> 00:32:41,519
president obama to profess Christianity

813
00:32:37,500 --> 00:32:45,000
the same reasons that lead 534 out of

814
00:32:41,519 --> 00:32:47,639
535 members of Congress to claim to be

815
00:32:45,000 --> 00:32:52,558
religious a statistical implausibility

816
00:32:47,640 --> 00:32:54,538
if not impossible t but to pretend to

817
00:32:52,558 --> 00:32:57,269
respect religion is different from

818
00:32:54,538 --> 00:33:01,769
really respecting religion which is the

819
00:32:57,269 --> 00:33:04,319
one place i cannot go with dr. Scott we

820
00:33:01,769 --> 00:33:06,960
are today celebrating a great science

821
00:33:04,319 --> 00:33:09,829
educator a gallon fighter for the cause

822
00:33:06,960 --> 00:33:12,058
of science and reason a brilliant woman

823
00:33:09,829 --> 00:33:13,980
universally admired role model of the

824
00:33:12,058 --> 00:33:17,369
height of her very considerable powers

825
00:33:13,980 --> 00:33:19,259
jeanne is a true scholar deeply read not

826
00:33:17,369 --> 00:33:21,119
just in the scientific literature but

827

00:33:19,259 --> 00:33:24,929
also in the bizarre counterculture

828
00:33:21,119 --> 00:33:27,658
anti-culture of creationism when she

829
00:33:24,929 --> 00:33:30,960
reads Duane Gish or William demski ken

830
00:33:27,659 --> 00:33:33,390
ham or Michael Behe Philip Johnson or

831
00:33:30,960 --> 00:33:35,429
even Ray Comfort the banana man she

832
00:33:33,390 --> 00:33:38,309
doesn't as I might simply hurl a book at

833
00:33:35,429 --> 00:33:40,288
the wall she reads it studies the

834
00:33:38,308 --> 00:33:42,690
methods of these people learns their

835
00:33:40,288 --> 00:33:44,759
tricks cross-references they're ignorant

836
00:33:42,690 --> 00:33:47,570
mountebank re perhaps them in

837
00:33:44,759 --> 00:33:49,500
inconsistency unmask their double-talk

838
00:33:47,569 --> 00:33:52,589
exposes their deceits and their

839
00:33:49,500 --> 00:33:55,048
pretensions it doesn't bonus she's

840
00:33:52,589 --> 00:33:57,449
recently opened a second front against

841
00:33:55,048 --> 00:33:59,579

climate change deniers and without

842

00:33:57,450 --> 00:34:01,620

neglecting the earlier campaign has

843

00:33:59,579 --> 00:34:06,329

rallied her forces to start all over

844

00:34:01,619 --> 00:34:08,638

again Eugenie Scott

845

00:34:06,329 --> 00:34:11,039

is a powerful friend to our rationalist

846

00:34:08,639 --> 00:34:14,280

movement inspiring people to take action

847

00:34:11,039 --> 00:34:15,898

to become involved if there's one honor

848

00:34:14,280 --> 00:34:18,179

greater than all others that we could

849

00:34:15,898 --> 00:34:22,079

bestow on her it would be to support her

850

00:34:18,179 --> 00:34:24,829

work but financially and in action we

851

00:34:22,079 --> 00:34:27,628

need more people to defend science and

852

00:34:24,829 --> 00:34:29,759

hardworking and dedicated as Jeanne and

853

00:34:27,628 --> 00:34:33,598

her colleagues are they cannot do it

854

00:34:29,760 --> 00:34:36,270

alone so I now make a personal appeal to

855

00:34:33,599 --> 00:34:40,019

all of you to visit the NCSE website and

856
00:34:36,269 --> 00:34:42,898
see what you can do to help I feel

857
00:34:40,019 --> 00:34:47,329
deeply honored that Eugenie Scott has

858
00:34:42,898 --> 00:34:47,329
agreed to accept this award in my name

859
00:34:52,219 --> 00:34:56,759
I'm Eugenie Scott I'm the executive

860
00:34:55,349 --> 00:34:59,700
director of the National Center for

861
00:34:56,760 --> 00:35:01,380
Science Education we are in Oakland

862
00:34:59,699 --> 00:35:02,848
California where a membership

863
00:35:01,380 --> 00:35:05,010
organization most of our members are

864
00:35:02,849 --> 00:35:07,910
scientists teachers people concerned

865
00:35:05,010 --> 00:35:10,220
about church and state separation we

866
00:35:07,909 --> 00:35:13,079
monitor the creationism and evolution

867
00:35:10,219 --> 00:35:15,389
controversy and we try to help teachers

868
00:35:13,079 --> 00:35:18,598
and school boards and legislators and

869
00:35:15,389 --> 00:35:22,739
citizens to cope with pressures against

870
00:35:18,599 --> 00:35:24,450
the teaching of evolution so in the 25

871
00:35:22,739 --> 00:35:26,759
years or so that we've been doing this

872
00:35:24,449 --> 00:35:29,629
we have found that there are three

873
00:35:26,760 --> 00:35:32,760
arguments that pretty much any

874
00:35:29,630 --> 00:35:36,660
creationist contention can be put into

875
00:35:32,760 --> 00:35:38,040
if it's a video or a letter to the

876
00:35:36,659 --> 00:35:40,949
editor our comment on a talk show

877
00:35:38,039 --> 00:35:42,659
whatever it'll pretty much fall into one

878
00:35:40,949 --> 00:35:45,059
of these three categories we call them

879
00:35:42,659 --> 00:35:46,618
the pillars of creationism I'd like to

880
00:35:45,059 --> 00:35:49,799
tell you a little bit about the pillars

881
00:35:46,619 --> 00:35:53,730
and why they're important to recognize

882
00:35:49,800 --> 00:35:55,650
because you as a scientist or a citizen

883
00:35:53,730 --> 00:35:58,349
who enjoy science who is interested in

884

00:35:55,650 --> 00:36:01,139
science I hope is concerned about what's

885
00:35:58,349 --> 00:36:03,510
going on in American public schools and

886
00:36:01,139 --> 00:36:07,108
the science classes there because at

887
00:36:03,510 --> 00:36:10,380
ncsc we hear a lot about pressures from

888
00:36:07,108 --> 00:36:12,358
school boards upon curriculum we hear

889
00:36:10,380 --> 00:36:14,789
pressures upon individual teachers from

890
00:36:12,358 --> 00:36:16,679
parents we hear about pressures from

891
00:36:14,789 --> 00:36:19,139
school boards or state legislators that

892
00:36:16,679 --> 00:36:20,099
trickle down to the classroom teacher as

893
00:36:19,139 --> 00:36:21,869
well

894
00:36:20,099 --> 00:36:23,969
and in all of these cases there's

895
00:36:21,869 --> 00:36:26,609
there's been this continuing story for

896
00:36:23,969 --> 00:36:29,279
over 30 years of people who don't want

897
00:36:26,610 --> 00:36:31,559
kids to learn evolution and even though

898
00:36:29,280 --> 00:36:33,180

the there have been various ins and outs

899

00:36:31,559 --> 00:36:36,000
of the creation and evolution

900

00:36:33,179 --> 00:36:39,089
controversy and the creationists have

901

00:36:36,000 --> 00:36:41,489
always lost in court this is in the

902

00:36:39,090 --> 00:36:43,559
evolving targets because creationism

903

00:36:41,489 --> 00:36:44,849
morphs shall we say in response to the

904

00:36:43,559 --> 00:36:47,519
legal environment there's a natural

905

00:36:44,849 --> 00:36:49,860
selection going on here and we have

906

00:36:47,519 --> 00:36:52,469
different forms of creationism and the

907

00:36:49,860 --> 00:36:54,660
current form of creationism that we're

908

00:36:52,469 --> 00:36:58,079
coping with it we're monitoring at NCSE

909

00:36:54,659 --> 00:37:01,099
today is perhaps the most difficult to

910

00:36:58,079 --> 00:37:03,659
fight because it doesn't appear to be

911

00:37:01,099 --> 00:37:06,299
the kind of thing you can challenge

912

00:37:03,659 --> 00:37:08,369
directly in court at any rate I'll get

913
00:37:06,300 --> 00:37:10,440
to that in a moment so let me tell you

914
00:37:08,369 --> 00:37:12,589
about the pillars of creationism because

915
00:37:10,440 --> 00:37:15,349
as a concerned citizen as a scientist I

916
00:37:12,590 --> 00:37:18,390
hope you'd be able to recognize them and

917
00:37:15,349 --> 00:37:20,039
understand the refutations of the

918
00:37:18,389 --> 00:37:22,440
pillars so that you can hopefully

919
00:37:20,039 --> 00:37:24,449
contribute to your own community or

920
00:37:22,440 --> 00:37:29,369
state and help to improve science

921
00:37:24,449 --> 00:37:31,559
education the first pillar is the pillar

922
00:37:29,369 --> 00:37:34,949
which challenges the science of

923
00:37:31,559 --> 00:37:36,989
evolution the claim is often made that

924
00:37:34,949 --> 00:37:39,449
evolution is a theory in crisis that

925
00:37:36,989 --> 00:37:40,949
scientists are giving up on evolution

926
00:37:39,449 --> 00:37:43,369
that more and more scientists are

927
00:37:40,949 --> 00:37:45,299
rejecting evolution as a failed theory

928
00:37:43,369 --> 00:37:47,339
that will come as a surprise to

929
00:37:45,300 --> 00:37:49,350
scientists but this is the claim that is

930
00:37:47,340 --> 00:37:52,170
made and it's made very very loudly on

931
00:37:49,349 --> 00:37:54,480
talk radio's on blogs and letters to the

932
00:37:52,170 --> 00:37:57,030
editor and so forth the second pillar of

933
00:37:54,480 --> 00:38:00,110
creationism is an ideological pillar

934
00:37:57,030 --> 00:38:02,490
it's the religious ideology that

935
00:38:00,110 --> 00:38:04,110
evolution is incompatible with my

936
00:38:02,489 --> 00:38:06,629
religious who's there for evolution

937
00:38:04,110 --> 00:38:09,660
cannot be true and this takes various

938
00:38:06,630 --> 00:38:11,690
forms the strongest form is if an

939
00:38:09,659 --> 00:38:14,819
individual is a biblical literalist or a

940
00:38:11,690 --> 00:38:17,039
qur'anic literalist this this point of

941

00:38:14,820 --> 00:38:18,990
view is present and conservative

942
00:38:17,039 --> 00:38:21,389
christians conservative Muslims and

943
00:38:18,989 --> 00:38:23,609
conservative choose the Middle Eastern

944
00:38:21,389 --> 00:38:27,599
monotheism's if you will the argument is

945
00:38:23,610 --> 00:38:30,030
made that my holy books when I look at

946
00:38:27,599 --> 00:38:32,339
them I see special creation God created

947
00:38:30,030 --> 00:38:33,990
everything specially in its present form

948
00:38:32,340 --> 00:38:36,990
over a short period

949
00:38:33,989 --> 00:38:39,569
I'm 6,000 years ago therefore evolution

950
00:38:36,989 --> 00:38:40,919
cannot be true and indeed evolution is

951
00:38:39,570 --> 00:38:44,100
incompatible with that particular

952
00:38:40,920 --> 00:38:46,019
religious view some people reject

953
00:38:44,099 --> 00:38:48,239
evolution because of a human

954
00:38:46,019 --> 00:38:50,489
exceptionalism perspective that that

955
00:38:48,239 --> 00:38:52,739

human beings are so superior to all

956

00:38:50,489 --> 00:38:55,199

other organisms God must have created

957

00:38:52,739 --> 00:38:58,349

especially there's a lot of ways that

958

00:38:55,199 --> 00:39:00,539

that religion is used to oppose the

959

00:38:58,349 --> 00:39:03,239

teaching of evolution the third pillar

960

00:39:00,539 --> 00:39:07,170

is the fairness pillar the call it's a

961

00:39:03,239 --> 00:39:10,439

cultural concept really it's a pillar

962

00:39:07,170 --> 00:39:14,010

where the anti evolutionists are tapping

963

00:39:10,440 --> 00:39:17,880

into some Theory deeply-held american

964

00:39:14,010 --> 00:39:21,810

cultural positions fairness balance free

965

00:39:17,880 --> 00:39:23,760

speech letting everybody speak you know

966

00:39:21,809 --> 00:39:25,380

town hall meetings all that sort of

967

00:39:23,760 --> 00:39:27,060

thing and and these are really great

968

00:39:25,380 --> 00:39:30,119

cultural values there's nothing wrong

969

00:39:27,059 --> 00:39:32,579

with them it's just that they are

970
00:39:30,119 --> 00:39:34,320
misapplied shall we say when it comes to

971
00:39:32,579 --> 00:39:37,949
how we decide what a kid's you learn in

972
00:39:34,320 --> 00:39:40,920
school now how can you as a concerned

973
00:39:37,949 --> 00:39:43,259
citizen deal with these three pillars as

974
00:39:40,920 --> 00:39:45,030
I say whatever argument you hear you can

975
00:39:43,260 --> 00:39:47,550
probably fit it into one of these three

976
00:39:45,030 --> 00:39:49,609
so if I can just give you the generic

977
00:39:47,550 --> 00:39:53,490
refutations then you can go from there

978
00:39:49,608 --> 00:39:56,039
there's plenty of evidence for the

979
00:39:53,489 --> 00:40:00,239
particular on various websites on NCS

980
00:39:56,039 --> 00:40:02,070
these websites and others the evolution

981
00:40:00,239 --> 00:40:04,139
is weak science pillar let's take a look

982
00:40:02,070 --> 00:40:06,359
at that first well the best way to

983
00:40:04,139 --> 00:40:08,129
refute that is to help your audience

984
00:40:06,358 --> 00:40:11,190
help the person you're talking to

985
00:40:08,130 --> 00:40:14,670
understand that in fact the consensus in

986
00:40:11,190 --> 00:40:16,440
the scientific community supporting the

987
00:40:14,670 --> 00:40:19,409
idea that evolution has happened the

988
00:40:16,440 --> 00:40:21,599
universe is old etc is enormously strong

989
00:40:19,409 --> 00:40:23,579
there have been many surveys of

990
00:40:21,599 --> 00:40:26,759
scientists there's been a lot of survey

991
00:40:23,579 --> 00:40:29,940
research of scientists showing upwards

992
00:40:26,760 --> 00:40:32,850
of the high ninety percent of scientists

993
00:40:29,940 --> 00:40:34,858
accept the idea of evolution it's hard

994
00:40:32,849 --> 00:40:36,480
to get scientists to agree on whether

995
00:40:34,858 --> 00:40:39,090
it's raining outside but there's this

996
00:40:36,480 --> 00:40:42,179
really really strong acceptance

997
00:40:39,090 --> 00:40:44,369
consensus view that evolution is valid

998

00:40:42,179 --> 00:40:47,009
science but the public doesn't know this

999
00:40:44,369 --> 00:40:47,730
in the few surveys that have been done

1000
00:40:47,010 --> 00:40:49,980
where the

1001
00:40:47,730 --> 00:40:51,480
members of the public have been asked do

1002
00:40:49,980 --> 00:40:53,789
you think scientists agree that

1003
00:40:51,480 --> 00:40:56,539
evolution has happened the difference

1004
00:40:53,789 --> 00:40:58,559
between what the public thinks

1005
00:40:56,539 --> 00:41:00,000
scientists believe in what scientists

1006
00:40:58,559 --> 00:41:03,000
actually believe is like twenty thirty

1007
00:41:00,000 --> 00:41:05,130
percent it's really a big disconnect so

1008
00:41:03,000 --> 00:41:08,159
help the public understand that

1009
00:41:05,130 --> 00:41:12,390
evolution is valid science the second

1010
00:41:08,159 --> 00:41:15,329
pillar the religion pillar is best dealt

1011
00:41:12,389 --> 00:41:17,608
with by helping people understand that

1012
00:41:15,329 --> 00:41:20,250

there's a very wide diversity of opinion

1013

00:41:17,608 --> 00:41:22,920

within the Christian community I often

1014

00:41:20,250 --> 00:41:24,599

joke that I think more evolution is

1015

00:41:22,920 --> 00:41:26,909

taught in Catholic parochial schools

1016

00:41:24,599 --> 00:41:29,039

than in public schools because the

1017

00:41:26,909 --> 00:41:31,529

Catholic church accepts something called

1018

00:41:29,039 --> 00:41:33,659

theistic evolution which is of course

1019

00:41:31,530 --> 00:41:35,670

evolution happened but it was the gut

1020

00:41:33,659 --> 00:41:37,769

way that God chose to bring about the

1021

00:41:35,670 --> 00:41:39,630

world according to his plan there's

1022

00:41:37,769 --> 00:41:41,699

varieties of theistic evolution out

1023

00:41:39,630 --> 00:41:44,010

there but it's basically an idea it's a

1024

00:41:41,699 --> 00:41:45,839

Christian theological idea that is fully

1025

00:41:44,010 --> 00:41:48,660

compatible with what science shows us

1026

00:41:45,840 --> 00:41:51,530

about living things evolving through

1027
00:41:48,659 --> 00:41:56,009
time Catholics mainstream protestants

1028
00:41:51,530 --> 00:41:58,590
official theology is in fact theistic

1029
00:41:56,010 --> 00:42:01,140
evolution so it is not the case that if

1030
00:41:58,590 --> 00:42:03,000
you are a Christian you have to reject

1031
00:42:01,139 --> 00:42:05,309
evolution some Christian views

1032
00:42:03,000 --> 00:42:07,619
absolutely but not all Christian views

1033
00:42:05,309 --> 00:42:10,139
most people think there's a dichotomy on

1034
00:42:07,619 --> 00:42:12,600
one side is atheist evolution on the

1035
00:42:10,139 --> 00:42:14,009
other side is Christian creationism but

1036
00:42:12,599 --> 00:42:16,380
that's false that's just empirically

1037
00:42:14,010 --> 00:42:21,960
wrong it's not a dichotomy it's a

1038
00:42:16,380 --> 00:42:25,230
continuum the third pillar the fairness

1039
00:42:21,960 --> 00:42:27,659
pillar is the most difficult one to deal

1040
00:42:25,230 --> 00:42:29,940
with because it is so strongly rooted in

1041
00:42:27,659 --> 00:42:32,009
American cultural traditions the

1042
00:42:29,940 --> 00:42:35,250
fairness pillar is best dealt with by

1043
00:42:32,010 --> 00:42:38,490
helping the public think about this a

1044
00:42:35,250 --> 00:42:40,409
little bit more more carefully obviously

1045
00:42:38,489 --> 00:42:41,939
we want debate in our society about a

1046
00:42:40,409 --> 00:42:44,250
lot of things people should be free to

1047
00:42:41,940 --> 00:42:47,909
express opinions people should be free

1048
00:42:44,250 --> 00:42:50,250
to argue vehemently about one position

1049
00:42:47,909 --> 00:42:51,929
or another one opinion or another that's

1050
00:42:50,250 --> 00:42:53,699
not really what we're talking about what

1051
00:42:51,929 --> 00:42:56,368
we're really talking about is a much

1052
00:42:53,699 --> 00:42:58,710
more narrow issue we're really talking

1053
00:42:56,369 --> 00:43:00,750
about what do you teach in high school

1054
00:42:58,710 --> 00:43:01,490
science class because that is where

1055

00:43:00,750 --> 00:43:03,739
these

1056
00:43:01,489 --> 00:43:05,359
policies that come to school boards or

1057
00:43:03,739 --> 00:43:08,419
the pressure that comes upon teachers

1058
00:43:05,360 --> 00:43:10,309
really come to what you should teach in

1059
00:43:08,420 --> 00:43:13,070
high school science class is no surprise

1060
00:43:10,309 --> 00:43:16,099
science and a high school science

1061
00:43:13,070 --> 00:43:18,410
teacher has the very important job of

1062
00:43:16,099 --> 00:43:20,989
picking from the huge array of subject

1063
00:43:18,409 --> 00:43:23,750
matter in say biology or physics or

1064
00:43:20,989 --> 00:43:26,839
chemistry or whatever that smaller range

1065
00:43:23,750 --> 00:43:28,429
of topics that is essential for young

1066
00:43:26,840 --> 00:43:30,050
learners who are just building an

1067
00:43:28,429 --> 00:43:34,669
understanding of that particular

1068
00:43:30,050 --> 00:43:38,300
scientific field in biology that one of

1069
00:43:34,670 --> 00:43:40,430

those core principles is evolution that

1070

00:43:38,300 --> 00:43:43,789

living things are related genetically in

1071

00:43:40,429 --> 00:43:47,239

this this huge genealogical tree of

1072

00:43:43,789 --> 00:43:50,179

living creatures through time so help

1073

00:43:47,239 --> 00:43:53,059

the public understand that we're not

1074

00:43:50,179 --> 00:43:54,739

talking about inhibiting anybody's free

1075

00:43:53,059 --> 00:43:56,929

speech we're not talking about science

1076

00:43:54,739 --> 00:43:58,969

being dogmatic and and forcing views

1077

00:43:56,929 --> 00:44:01,279

upon students we're talking about doing

1078

00:43:58,969 --> 00:44:03,469

the same thing in high school biology

1079

00:44:01,280 --> 00:44:06,050

class as we do in physics or chemistry

1080

00:44:03,469 --> 00:44:09,618

or for that matter mathematics and

1081

00:44:06,050 --> 00:44:11,359

English literature and geography we

1082

00:44:09,619 --> 00:44:14,390

teach the consensus view of the field

1083

00:44:11,358 --> 00:44:16,369

now if the creationists or the

1084
00:44:14,389 --> 00:44:19,179
intelligent design people or anybody

1085
00:44:16,369 --> 00:44:21,680
else who challenges evolution wants to

1086
00:44:19,179 --> 00:44:23,179
make the argument that they have a valid

1087
00:44:21,679 --> 00:44:24,858
science that deserves to be taught in

1088
00:44:23,179 --> 00:44:27,529
the public school classroom knock

1089
00:44:24,858 --> 00:44:30,710
yourself out but your job is to convince

1090
00:44:27,530 --> 00:44:33,470
the scientific community first what is

1091
00:44:30,710 --> 00:44:36,190
happening is that because of the

1092
00:44:33,469 --> 00:44:38,989
politicized nature of American education

1093
00:44:36,190 --> 00:44:41,030
curriculum decisions are made by elected

1094
00:44:38,989 --> 00:44:42,709
officials and elected officials are

1095
00:44:41,030 --> 00:44:45,320
looking over their shoulder two votes as

1096
00:44:42,710 --> 00:44:47,740
opposed to necessarily paying attention

1097
00:44:45,320 --> 00:44:50,359
to what's you know the best curriculum

1098
00:44:47,739 --> 00:44:53,329
because American education is

1099
00:44:50,358 --> 00:44:56,210
politicized there are pressures upon

1100
00:44:53,329 --> 00:44:58,969
teachers outside of science to change

1101
00:44:56,210 --> 00:45:01,099
the curriculum one way or the other they

1102
00:44:58,969 --> 00:45:06,199
should be protected from that students

1103
00:45:01,099 --> 00:45:08,779
should not be the the platform upon

1104
00:45:06,199 --> 00:45:10,460
which we fight the culture wars let the

1105
00:45:08,780 --> 00:45:11,930
creationists or the intelligent design

1106
00:45:10,460 --> 00:45:13,820
people or the anti-evolution is

1107
00:45:11,929 --> 00:45:14,829
demonstrate to the scientific community

1108
00:45:13,820 --> 00:45:17,320
that they have

1109
00:45:14,829 --> 00:45:18,670
valid views that evolution is either a

1110
00:45:17,320 --> 00:45:20,530
week science or that they've got a

1111
00:45:18,670 --> 00:45:23,349
better alternative and it'll trickle

1112

00:45:20,530 --> 00:45:25,990
down to the high school if it makes it

1113
00:45:23,349 --> 00:45:29,619
into the consensus they argue fairness

1114
00:45:25,989 --> 00:45:33,459
frankly to teach students that something

1115
00:45:29,619 --> 00:45:36,099
is not valid when there's such a strong

1116
00:45:33,460 --> 00:45:38,710
scientific consensus about it is the

1117
00:45:36,099 --> 00:45:40,989
most unfair thing you can do I would

1118
00:45:38,710 --> 00:45:43,240
hope that being familiar with the

1119
00:45:40,989 --> 00:45:46,659
refutation zuv the three pillars would

1120
00:45:43,239 --> 00:45:48,369
give you more confidence in standing up

1121
00:45:46,659 --> 00:45:51,399
for good science in your community if

1122
00:45:48,369 --> 00:45:53,380
you hear of a school board issue or some

1123
00:45:51,400 --> 00:45:55,300
state legislation or school board

1124
00:45:53,380 --> 00:45:57,280
legislation or if you even hear word

1125
00:45:55,300 --> 00:45:59,830
that one of your local teachers is

1126
00:45:57,280 --> 00:46:01,660

reluctant to teach evolution because she

1127

00:45:59,829 --> 00:46:04,029

or he feels that there is pressure from

1128

00:46:01,659 --> 00:46:05,980

the community I hope that you will stand

1129

00:46:04,030 --> 00:46:09,310

up for good science and the first thing

1130

00:46:05,980 --> 00:46:11,590

you can do is contact us at NCS ecomme

1131

00:46:09,309 --> 00:46:13,989

we can put you in touch with people in

1132

00:46:11,590 --> 00:46:16,570

your community who feel likewise we can

1133

00:46:13,989 --> 00:46:18,369

give you the ammunition so we say the

1134

00:46:16,570 --> 00:46:21,789

arguments that you can use on the

1135

00:46:18,369 --> 00:46:23,949

methods that you can use to make a good

1136

00:46:21,789 --> 00:46:27,070

argument to your local decision makers

1137

00:46:23,949 --> 00:46:30,939

because teachers need help we're we get

1138

00:46:27,070 --> 00:46:33,010

calls every week from teachers who want

1139

00:46:30,940 --> 00:46:35,679

some advice who want some support to

1140

00:46:33,010 --> 00:46:37,870

teach good science and they deserve all

1141
00:46:35,679 --> 00:46:42,029
the support that we as scientists and

1142
00:46:37,869 --> 00:46:42,029
concerned citizens can give them thank

1143
00:46:50,090 --> 00:46:56,789
hi this is brian dunning from the

1144
00:46:52,650 --> 00:46:59,820
sceptile podcast ATS kept ID com for 15

1145
00:46:56,789 --> 00:47:02,579
years now dr. Bob's trivia quiz has been

1146
00:46:59,820 --> 00:47:05,039
a part of Australian skeptics each month

1147
00:47:02,579 --> 00:47:07,920
the mysterious dr. Bob comes up with

1148
00:47:05,039 --> 00:47:11,099
questions that defy all logic and reason

1149
00:47:07,920 --> 00:47:13,320
only the best of the best dare attempt

1150
00:47:11,099 --> 00:47:16,529
to answer these brain twisters and no

1151
00:47:13,320 --> 00:47:22,100
google won't help you visit dr. Bob's

1152
00:47:16,530 --> 00:47:25,500
quiz wordpress.com that's dr be OBS quiz

1153
00:47:22,099 --> 00:47:28,469
wordpress.com to take part and to see

1154
00:47:25,500 --> 00:47:31,500
the complete archive of dr. bob's trivia

1155
00:47:28,469 --> 00:47:34,129
quiz i'm brian dunning from skep tide

1156
00:47:31,500 --> 00:47:34,130
calm

1157
00:47:45,440 --> 00:47:50,190
where's the TARDIS we're coming to you

1158
00:47:47,940 --> 00:47:51,960
live from the secret carpeted corridor

1159
00:47:50,190 --> 00:47:54,300
just near skeptics in the pub and we

1160
00:47:51,960 --> 00:47:55,500
with Garrett here ad today Gary how good

1161
00:47:54,300 --> 00:47:58,140
to see along here it's get is the pub

1162
00:47:55,500 --> 00:48:00,449
again yes and I'm excited to be taking

1163
00:47:58,139 --> 00:48:02,429
part in this corridor conversation you

1164
00:48:00,449 --> 00:48:04,079
see them going on you hear them on the

1165
00:48:02,429 --> 00:48:06,299
podcast now you're actually part of it

1166
00:48:04,079 --> 00:48:08,549
well it's like joining a secret Club

1167
00:48:06,300 --> 00:48:09,539
though we got a handshake or something

1168
00:48:08,550 --> 00:48:11,070
like the world there will be a special

1169

00:48:09,539 --> 00:48:12,539
one later I guess you'll feel like your

1170
00:48:11,070 --> 00:48:14,309
life is over once this interview is done

1171
00:48:12,539 --> 00:48:15,719
because it's all been done really well

1172
00:48:14,309 --> 00:48:17,130
that's only if you believe in a single

1173
00:48:15,719 --> 00:48:18,629
life if you believe your past and future

1174
00:48:17,130 --> 00:48:19,950
lives and obviously you've got a much

1175
00:48:18,630 --> 00:48:21,630
broader perspective on this sort of

1176
00:48:19,949 --> 00:48:23,639
thing which has got nothing to do

1177
00:48:21,630 --> 00:48:24,780
whatsoever to do with free cons that it

1178
00:48:23,639 --> 00:48:28,170
could because we're here to talk about

1179
00:48:24,780 --> 00:48:29,640
freecom which is on at the UTS and I've

1180
00:48:28,170 --> 00:48:31,230
been to the skeptic camp there a couple

1181
00:48:29,639 --> 00:48:32,879
of times and there's a much broader

1182
00:48:31,230 --> 00:48:34,469
thing involving a whole lot of other

1183
00:48:32,880 --> 00:48:36,119

things trying to explain it in a capsule

1184

00:48:34,469 --> 00:48:38,129

to the Sydney listen it and get along

1185

00:48:36,119 --> 00:48:39,480

there i'm glad that i mentioned the sort

1186

00:48:38,130 --> 00:48:41,730

of multiple lives because there are

1187

00:48:39,480 --> 00:48:43,980

certainly a lot of life happening at a

1188

00:48:41,730 --> 00:48:46,679

freak on effectively what it is it's a

1189

00:48:43,980 --> 00:48:49,260

gathering of people various tribes of

1190

00:48:46,679 --> 00:48:51,690

science fiction fans and people who like

1191

00:48:49,260 --> 00:48:54,030

science fiction sci fi people who like

1192

00:48:51,690 --> 00:48:56,490

to write it people who like to read it

1193

00:48:54,030 --> 00:48:58,740

and people would just like to watch did

1194

00:48:56,489 --> 00:49:00,119

you find that the the true blood people

1195

00:48:58,739 --> 00:49:02,789

don't really get on with the buffy the

1196

00:49:00,119 --> 00:49:05,219

vampire slayer' people well generally

1197

00:49:02,789 --> 00:49:08,070

it's not an issue because most free cons

1198
00:49:05,219 --> 00:49:11,159
actually take place in daylight on the

1199
00:49:08,070 --> 00:49:12,720
weekend at an inexpensive location that

1200
00:49:11,159 --> 00:49:14,670
you can get to and did i mention that

1201
00:49:12,719 --> 00:49:15,779
it's actually a free event yeah and how

1202
00:49:14,670 --> 00:49:17,400
many people do you expect to get along

1203
00:49:15,780 --> 00:49:19,950
and I believe you've got two rooms going

1204
00:49:17,400 --> 00:49:24,230
we have two rooms going the a room and

1205
00:49:19,949 --> 00:49:29,219
the be room and what I'm presenting is a

1206
00:49:24,230 --> 00:49:31,590
program of about 18 hours of discussions

1207
00:49:29,219 --> 00:49:34,409
of all sorts of science fictional issues

1208
00:49:31,590 --> 00:49:36,000
and what do you think is that the hook

1209
00:49:34,409 --> 00:49:36,869
to get people along that haven't been to

1210
00:49:36,000 --> 00:49:38,699
this kind of thing because they're

1211
00:49:36,869 --> 00:49:40,889
thinking oh they're having trouble

1212
00:49:38,699 --> 00:49:42,989
imagining what it is well the great

1213
00:49:40,889 --> 00:49:46,500
thing about it is if you can imagine a

1214
00:49:42,989 --> 00:49:48,779
university common room conversation it's

1215
00:49:46,500 --> 00:49:50,820
sort of at that level you'll meet people

1216
00:49:48,780 --> 00:49:52,420
there who are into science fiction and

1217
00:49:50,820 --> 00:49:55,059
you'll discover they're also in a lot of

1218
00:49:52,420 --> 00:49:57,700
other things so if you're only are just

1219
00:49:55,059 --> 00:50:00,639
sort of i read it or i watch it but i'm

1220
00:49:57,699 --> 00:50:02,889
not really a sci-fi fan I don't wear the

1221
00:50:00,639 --> 00:50:04,539
costume I don't wear the point it is

1222
00:50:02,889 --> 00:50:07,029
although some people do nothing wrong

1223
00:50:04,539 --> 00:50:09,190
with that you'll probably find their

1224
00:50:07,030 --> 00:50:13,540
people who will be on your wavelength

1225
00:50:09,190 --> 00:50:16,450
more so than the people at work or your

1226

00:50:13,539 --> 00:50:19,539
immediate family who you've just ignored

1227
00:50:16,449 --> 00:50:21,099
it means that either sci-fi not good and

1228
00:50:19,539 --> 00:50:22,659
also you can make it as little or as

1229
00:50:21,099 --> 00:50:24,400
much as you want you can come along and

1230
00:50:22,659 --> 00:50:27,489
just dip your toe in the whole thing or

1231
00:50:24,400 --> 00:50:29,410
whatever and like skeptics like even

1232
00:50:27,489 --> 00:50:31,539
conspiracy theory people to a certain

1233
00:50:29,409 --> 00:50:34,149
extent anomalous science fiction fans

1234
00:50:31,539 --> 00:50:38,710
they don't tend to be as judgmental as

1235
00:50:34,150 --> 00:50:40,030
you would think well that's true one of

1236
00:50:38,710 --> 00:50:42,119
the other things that I've found about

1237
00:50:40,030 --> 00:50:45,040
science fiction fans is that they are

1238
00:50:42,119 --> 00:50:47,019
generally not just well read in science

1239
00:50:45,039 --> 00:50:49,170
fiction but they're usually quite well

1240
00:50:47,019 --> 00:50:52,119

read in a couple of other fields as well

1241
00:50:49,170 --> 00:50:54,099
often they'll use the word catharsis in

1242
00:50:52,119 --> 00:50:56,650
a sentence and know what it means unlike

1243
00:50:54,099 --> 00:50:59,110
me will I meet people that can have a

1244
00:50:56,650 --> 00:51:01,900
Frank and open discussion about the

1245
00:50:59,110 --> 00:51:03,970
morality of Captain Scarlet the mr. ons

1246
00:51:01,900 --> 00:51:05,950
I mean basically we did destroy their

1247
00:51:03,969 --> 00:51:07,419
city on Mars and they're angry with us

1248
00:51:05,949 --> 00:51:09,699
so we don't have the moral high ground

1249
00:51:07,420 --> 00:51:12,789
it is quite possible that you would be

1250
00:51:09,699 --> 00:51:15,519
able to find people like that but I find

1251
00:51:12,789 --> 00:51:17,829
that the real killer app of a freak on

1252
00:51:15,519 --> 00:51:19,210
as being a free entry event is it

1253
00:51:17,829 --> 00:51:21,789
instead of having to decide in advance

1254
00:51:19,210 --> 00:51:23,380
at hey I want to go to this thing it's

1255
00:51:21,789 --> 00:51:24,880
going to cost me so much I'm going to

1256
00:51:23,380 --> 00:51:26,980
have to spend a day there I'm going to

1257
00:51:24,880 --> 00:51:28,990
have to make it more while you can go to

1258
00:51:26,980 --> 00:51:32,289
a freak on and if you like the first

1259
00:51:28,989 --> 00:51:34,619
hour of it great you can stay just for

1260
00:51:32,289 --> 00:51:37,449
that session if you like although

1261
00:51:34,619 --> 00:51:39,039
usually you'll find that it's

1262
00:51:37,449 --> 00:51:40,869
interesting enough to compel you to

1263
00:51:39,039 --> 00:51:42,759
stick around for another session and

1264
00:51:40,869 --> 00:51:44,650
another session and another session well

1265
00:51:42,760 --> 00:51:46,990
where can we go online to find out more

1266
00:51:44,650 --> 00:51:50,470
about it and when is it on you can

1267
00:51:46,989 --> 00:51:53,189
contact me by email and the clever

1268
00:51:50,469 --> 00:51:57,129
little email for that is seeded free

1269
00:51:53,190 --> 00:52:00,820
con-com @ gmail.com I'll just repeat

1270
00:51:57,130 --> 00:52:02,789
that for you again seed sy d freak on

1271
00:52:00,820 --> 00:52:05,818
calm

1272
00:52:02,789 --> 00:52:07,619
gmail com and would there be anyone

1273
00:52:05,818 --> 00:52:10,228
that's a real fan of the work of a

1274
00:52:07,619 --> 00:52:14,278
William Shatner specifically in flying

1275
00:52:10,228 --> 00:52:16,528
high too well remember this is a science

1276
00:52:14,278 --> 00:52:19,739
fiction convention there is a carpentry

1277
00:52:16,528 --> 00:52:21,900
convention later on in town at the

1278
00:52:19,739 --> 00:52:24,088
showground if you're interested in

1279
00:52:21,900 --> 00:52:26,519
wooden acting I think that's a very good

1280
00:52:24,088 --> 00:52:28,078
place for you to hang out look good luck

1281
00:52:26,518 --> 00:52:30,958
with it and we may see you there and of

1282
00:52:28,079 --> 00:52:35,539
course may the force be with you live

1283

00:52:30,958 --> 00:52:35,538
long and do something indeed Nana

1284
00:52:52,630 --> 00:52:57,740
thank you for listening to the skeptic

1285
00:52:55,730 --> 00:52:59,480
zone all those pancakes were good

1286
00:52:57,739 --> 00:53:02,209
haven't had pancakes for a while it's

1287
00:52:59,480 --> 00:53:03,769
hard to beat that maple syrup tell you

1288
00:53:02,210 --> 00:53:05,780
what when I went to a las vegas last

1289
00:53:03,769 --> 00:53:07,460
time for the amazing meeting i ordered a

1290
00:53:05,780 --> 00:53:10,400
big stack of pancakes I think I had

1291
00:53:07,460 --> 00:53:14,869
enough for three people two dogs and six

1292
00:53:10,400 --> 00:53:16,400
cats love pancakes I shall keep you

1293
00:53:14,869 --> 00:53:20,179
updated on my progress about the

1294
00:53:16,400 --> 00:53:21,590
vaccination chronicles documentary I'm

1295
00:53:20,179 --> 00:53:25,639
filming at the moment there is a short

1296
00:53:21,590 --> 00:53:28,309
clip at wwc eggs on TV from stuff I shot

1297
00:53:25,639 --> 00:53:30,079

of a month or two ago shot much more

1298

00:53:28,309 --> 00:53:32,809

since then and gives you an idea what

1299

00:53:30,079 --> 00:53:35,150

I'm trying to achieve thank you if you

1300

00:53:32,809 --> 00:53:36,949

care to chip in and help me with that

1301

00:53:35,150 --> 00:53:39,889

that project I think it's quite

1302

00:53:36,949 --> 00:53:42,079

worthwhile coming up on next week's show

1303

00:53:39,889 --> 00:53:44,659

we're going to hear from Benjamin

1304

00:53:42,079 --> 00:53:46,989

Radford that's well worth waiting for

1305

00:53:44,659 --> 00:53:50,239

Benjamin red but a really top line

1306

00:53:46,989 --> 00:53:51,859

paranormal investigator and just before

1307

00:53:50,239 --> 00:53:53,299

I go and sort of harks back to this

1308

00:53:51,860 --> 00:53:54,769

episode of the skeptic zone talking

1309

00:53:53,300 --> 00:53:56,690

about the evolution and creationism and

1310

00:53:54,769 --> 00:53:58,759

all that sort of stuff now I stumbled

1311

00:53:56,690 --> 00:54:03,519

upon a really good youtube channel

1312
00:53:58,760 --> 00:54:06,500
youtube.com slash evolution documentary

1313
00:54:03,519 --> 00:54:08,030
and something like 200 documentaries on

1314
00:54:06,500 --> 00:54:12,469
there about natural selection and

1315
00:54:08,030 --> 00:54:15,890
evolution and biology and anatomy that

1316
00:54:12,469 --> 00:54:18,709
sort of stuff wow it's it's the smallest

1317
00:54:15,889 --> 00:54:20,809
but it's it's incredible I recommend you

1318
00:54:18,710 --> 00:54:23,599
visit the evolution documentary and

1319
00:54:20,809 --> 00:54:26,239
peruse those documentaries I'm sure that

1320
00:54:23,599 --> 00:54:28,339
will keep you occupied for the week to

1321
00:54:26,239 --> 00:54:31,099
come and until next week's show this is

1322
00:54:28,340 --> 00:54:33,130
Richard Saunders signing off from Sydney

1323
00:54:31,099 --> 00:54:33,130
Australia

1324
00:54:34,949 --> 00:54:42,059
you've been listening to the skeptic

1325
00:54:37,050 --> 00:54:45,810
zone visit her website at www.skeptics

1326
00:54:42,059 --> 00:54:48,769
on TV the comments context and extra

1327
00:54:45,809 --> 00:54:48,769
video reports