

**The Skeptic Zone**  
**Show 272 - 4 Jan 2014**



**Dr Eugenie Scott**

1  
00:00:23,050 --> 00:00:09,080  
welcome to the skeptic zone the podcast

2  
00:00:30,230 --> 00:00:25,460  
hello and welcome to the skeptic zone

3  
00:00:32,479 --> 00:00:30,240  
for the fourth of january 2014 oh my

4  
00:00:36,200 --> 00:00:32,489  
goodness me the skeptic zone has now

5  
00:00:42,500 --> 00:00:36,210  
been heard in 2008 2009 2010 2011 2012

6  
00:00:45,680 --> 00:00:42,510  
2013 2014 7 different years how

7  
00:00:48,140 --> 00:00:45,690  
ridiculous is that I hope we have a fine

8  
00:00:50,570 --> 00:00:48,150  
year ahead of skeptical activities to

9  
00:00:52,580 --> 00:00:50,580  
kick off this year an extended interview

10  
00:00:54,740 --> 00:00:52,590  
with Jeannie Scott from the National

11  
00:00:57,799 --> 00:00:54,750  
Center for Science Education in Oakland

12  
00:01:00,259 --> 00:00:57,809  
who is just on the cusp the verge of

13  
00:01:02,420 --> 00:01:00,269

retiring this is the last interview with

14

00:01:06,289 --> 00:01:02,430

Jeannie before her retirement i SAT with

15

00:01:08,920 --> 00:01:06,299

her in her office which is basically

16

00:01:11,630 --> 00:01:08,930

almost packed up in lots of boxes by now

17

00:01:13,700 --> 00:01:11,640

so a catch up with Jeannie Scott coming

18

00:01:16,070 --> 00:01:13,710

up at the top of the show also on this

19

00:01:18,590 --> 00:01:16,080

week's show a special from the Royal

20

00:01:20,450 --> 00:01:18,600

Institution of Australia with robert

21

00:01:22,359 --> 00:01:20,460

Llewellyn being a sort of a guest

22

00:01:26,120 --> 00:01:22,369

interviewer talking about electric cars

23

00:01:27,880 --> 00:01:26,130

also I visit Google the Google

24

00:01:30,500 --> 00:01:27,890

headquarters have a quick chat to a

25

00:01:33,410 --> 00:01:30,510

skeptic zone listen to chris who works

26

00:01:36,530 --> 00:01:33,420

at google is very kind to her host a

27

00:01:40,160 --> 00:01:36,540

little too great fun and not forgetting

28

00:01:42,500 --> 00:01:40,170

maynard spooky action maynard talks to

29

00:01:45,580 --> 00:01:42,510

code breaker dr. steve roberts from the

30

00:01:50,240 --> 00:01:45,590

Victorian skeptics and poet laureate

31

00:01:53,390 --> 00:01:50,250

Shelley who was a waxing lyrical at the

32

00:01:56,030 --> 00:01:53,400

National Convention happy birthday to

33

00:01:58,970 --> 00:01:56,040

Iran sir give Brian Dunning Anna Linda

34

00:02:00,590 --> 00:01:58,980

Brown who all hit milestones actually

35

00:02:03,649 --> 00:02:00,600

Brian didn't I don't think he could ever

36

00:02:05,570 --> 00:02:03,659

hit a milestone if he tried around it'll

37

00:02:08,089 --> 00:02:05,580

Linda hit a milestone and Brian and well

38

00:02:09,139 --> 00:02:08,099

Brian and I have when we're getting

39

00:02:10,669 --> 00:02:09,149

there folks we're getting there but

40

00:02:13,729 --> 00:02:10,679

happy birthday to all those wonderful

41

00:02:16,910 --> 00:02:13,739

skeptics well I better race downstairs

42

00:02:19,100 --> 00:02:16,920

and well pack actually because I not too

43

00:02:22,100 --> 00:02:19,110

many hours I'll be heading off to the

44

00:02:24,949 --> 00:02:22,110

airport to fly back to Sydney Australia

45

00:02:27,380 --> 00:02:24,959

from the San Francisco Bay Area so while

46

00:02:29,839 --> 00:02:27,390

I am busily sorting up my socks from my

47

00:02:50,820 --> 00:02:29,849

shirts and from my bits and pieces I

48

00:02:55,750 --> 00:02:53,320

at the office of the National Center for

49

00:02:58,539 --> 00:02:55,760

Science Education one last time Eugenie

50

00:03:01,630 --> 00:02:58,549

Scott well no I don't know I I hope you

51  
00:03:04,059 --> 00:03:01,640  
come back to the NCSC again and next

52  
00:03:06,819 --> 00:03:04,069  
time you interview and read who will be

53  
00:03:10,569 --> 00:03:06,829  
the new executive director of NCS am

54  
00:03:14,589 --> 00:03:10,579  
about well let's see the sixth of

55  
00:03:16,900 --> 00:03:14,599  
January not far off not far off well I

56  
00:03:19,569 --> 00:03:16,910  
mean I've been coming here to visit you

57  
00:03:22,089 --> 00:03:19,579  
in this very office now but I guess it

58  
00:03:23,770 --> 00:03:22,099  
must be ten years at least yeah yeah I

59  
00:03:27,280 --> 00:03:23,780  
would there was a photograph of you and

60  
00:03:30,670 --> 00:03:27,290  
I just over past that window out there

61  
00:03:32,140 --> 00:03:30,680  
when all the skulls was right and I was

62  
00:03:34,390 --> 00:03:32,150  
looking at it the other day and I forgot

63  
00:03:36,729 --> 00:03:34,400

to note the year but i can tell you my

64

00:03:39,880 --> 00:03:36,739

hair's a lot darker in that photograph I

65

00:03:42,729 --> 00:03:39,890

have fewer wrinkles and yes we were both

66

00:03:45,339 --> 00:03:42,739

younger but but but think of how much

67

00:03:47,379 --> 00:03:45,349

we've learned in the intervening here as

68

00:03:49,960 --> 00:03:47,389

true so much wiser and more

69

00:03:51,849 --> 00:03:49,970

knowledgeable even if grayer and more

70

00:03:53,559 --> 00:03:51,859

wrinkled yeah yeah you take the bitter

71

00:03:55,750 --> 00:03:53,569

with the sweet on this right you have to

72

00:03:58,420 --> 00:03:55,760

it's we're sitting in what will soon be

73

00:04:00,580 --> 00:03:58,430

your former office you've been busily

74

00:04:02,620 --> 00:04:00,590

taking down all the wonderful things off

75

00:04:05,650 --> 00:04:02,630

the wall and things are in boxes and

76

00:04:08,199 --> 00:04:05,660

you're doing the big passing of the

77

00:04:12,640 --> 00:04:08,209

button on it I am I am tomorrow I will

78

00:04:15,960 --> 00:04:12,650

be doing the spackling of the walls now

79

00:04:18,490 --> 00:04:15,970

an is coming in monday next week and

80

00:04:21,430 --> 00:04:18,500

we'll have a week of overlap of

81

00:04:25,320 --> 00:04:21,440

orientation sort of giving her the big

82

00:04:28,420 --> 00:04:25,330

picture obviously i mean the the NCSE

83

00:04:31,000 --> 00:04:28,430

programs staff will really be the people

84

00:04:32,320 --> 00:04:31,010

who won't be orienting her yeah for what

85

00:04:34,060 --> 00:04:32,330

we do around here and what our current

86

00:04:36,279 --> 00:04:34,070

projects are and what they're working on

87

00:04:39,550 --> 00:04:36,289

and you know where what the future will

88

00:04:41,409 --> 00:04:39,560

be the support staff will orient her in

89

00:04:44,920 --> 00:04:41,419

terms of how we do the financial stuff

90

00:04:47,150 --> 00:04:44,930

and now we keep track of the wonderful

91

00:04:50,360 --> 00:04:47,160

donations we get from people and

92

00:04:52,820 --> 00:04:50,370

budgetary things and so forth so and

93

00:04:56,240 --> 00:04:52,830

then obviously I'll be more than happy

94

00:05:03,080 --> 00:04:56,250

to be on call if she wants to has any

95

00:05:06,230 --> 00:05:03,090

additional quitting calls from not just

96

00:05:10,910 --> 00:05:06,240

an but staff Glenn isn't here do you

97

00:05:13,010 --> 00:05:10,920

know where I can find me I mean I have

98

00:05:15,920 --> 00:05:13,020

been here for a really long time yeah

99

00:05:19,120 --> 00:05:15,930

yeah and I think Glen William but when

100

00:05:22,310 --> 00:05:19,130

you say here you don't mean physically

101  
00:05:25,610 --> 00:05:22,320  
see how long is in CSV being in here no

102  
00:05:29,210 --> 00:05:25,620  
plan Oh probably about 10 or 12 years my

103  
00:05:30,680 --> 00:05:29,220  
bad yeah so in this office but it's

104  
00:05:32,540 --> 00:05:30,690  
really good to move every once in a

105  
00:05:34,520 --> 00:05:32,550  
while because you do pair of things down

106  
00:05:37,630 --> 00:05:34,530  
but what you have to don't you yeah

107  
00:05:40,430 --> 00:05:37,640  
we've done pretty well are our archivist

108  
00:05:42,740 --> 00:05:40,440  
Charles Hargrove our archivists does a

109  
00:05:45,070 --> 00:05:42,750  
wonderful job and kind of keeping track

110  
00:05:47,210 --> 00:05:45,080  
of the things that need to be saved and

111  
00:05:50,450 --> 00:05:47,220  
dispensing with the items that we can

112  
00:05:52,640 --> 00:05:50,460  
find elsewhere but just to remind your

113  
00:05:55,250 --> 00:05:52,650

listeners we have wonderful archives

114

00:05:58,040 --> 00:05:55,260

here in fact we have had Australian

115

00:06:00,050 --> 00:05:58,050

scholars come to work on our archives

116

00:06:01,940 --> 00:06:00,060

who are interested in studying it's the

117

00:06:04,670 --> 00:06:01,950

room around the corner is the big yes

118

00:06:09,140 --> 00:06:04,680

yes yeah the library and archives we've

119

00:06:12,790 --> 00:06:09,150

got a wonderful stuff in fact my first

120

00:06:15,650 --> 00:06:12,800

job my first task after retiring well

121

00:06:19,370 --> 00:06:15,660

let me preface that my very first job

122

00:06:21,680 --> 00:06:19,380

after retiring will be to spend a couple

123

00:06:24,020 --> 00:06:21,690

months just puttering around my house

124

00:06:29,770 --> 00:06:24,030

which I will enjoy doing thoroughly all

125

00:06:34,520 --> 00:06:29,780

the projects that kind of got delayed

126

00:06:36,590 --> 00:06:34,530

justification for working on but after a

127

00:06:38,330 --> 00:06:36,600

couple of months after an settles in and

128

00:06:40,909 --> 00:06:38,340

you know the new routines get developed

129

00:06:43,550 --> 00:06:40,919

which is always necessary in any major

130

00:06:45,770 --> 00:06:43,560

transition like this I plan to come back

131

00:06:47,750 --> 00:06:45,780

and work in the archives and the first

132

00:06:51,260 --> 00:06:47,760

thing I'm going to do the first thing I

133

00:06:55,010 --> 00:06:51,270

would like to do is to write the really

134

00:06:58,310 --> 00:06:55,020

definitive history of NCSE I was part of

135

00:07:00,050 --> 00:06:58,320

this history but with our archives I I

136

00:07:02,270 --> 00:07:00,060

can really do it from the scholar

137

00:07:04,640 --> 00:07:02,280

I don't have to just remember up what's

138

00:07:06,800 --> 00:07:04,650

that nineteen eighty or was that 1979 i

139

00:07:08,540 --> 00:07:06,810

mean i can actually document what went

140

00:07:11,120 --> 00:07:08,550

on and i think that's going to be a

141

00:07:12,500 --> 00:07:11,130

really fun experience for me yeah i'm

142

00:07:14,870 --> 00:07:12,510

really looking forward to that so i'm

143

00:07:19,550 --> 00:07:14,880

going to spend to what end to what do

144

00:07:22,280 --> 00:07:19,560

you what will this be for a book just

145

00:07:25,820 --> 00:07:22,290

for the records all of the above

146

00:07:28,460 --> 00:07:25,830

nonsense it's something that needs to be

147

00:07:32,780 --> 00:07:28,470

done and i think i can do it better than

148

00:07:37,460 --> 00:07:32,790

then most considering i have not just my

149

00:07:39,140 --> 00:07:37,470

own memories and contacts but also these

150

00:07:41,480 --> 00:07:39,150

wonderful archives that we have here

151

00:07:44,180 --> 00:07:41,490

this is an important organization it's

152

00:07:48,110 --> 00:07:44,190

been around for 30 years plus and it's

153

00:07:50,390 --> 00:07:48,120

very easy for early records to get lost

154

00:07:54,440 --> 00:07:50,400

or to get forgotten or to get misplaced

155

00:07:55,700 --> 00:07:54,450

or to be promised to end up in some sort

156

00:07:58,250 --> 00:07:55,710

of an archive and then that really

157

00:08:00,290 --> 00:07:58,260

happen we have managed to get archives

158

00:08:02,330 --> 00:08:00,300

from a number of early board members a

159

00:08:04,100 --> 00:08:02,340

number of people who are very active in

160

00:08:06,409 --> 00:08:04,110

the creation and evolution controversy

161

00:08:08,540 --> 00:08:06,419

back in the 70s and 80s and those

162

00:08:11,570 --> 00:08:08,550

materials are wonderful i bet they are

163

00:08:13,610 --> 00:08:11,580

but how how things have changed over the

164

00:08:15,920 --> 00:08:13,620

years from the creation is going to view

165

00:08:18,620 --> 00:08:15,930

huh yeah very much I mean that there's

166

00:08:21,170 --> 00:08:18,630

been a huge evolution in creation let's

167

00:08:24,320 --> 00:08:21,180

face it no I mean they they have gone

168

00:08:25,880 --> 00:08:24,330

through except there's been this there's

169

00:08:28,040 --> 00:08:25,890

been this wonderful structural

170

00:08:31,450 --> 00:08:28,050

continuity at the same time you know

171

00:08:33,890 --> 00:08:31,460

it's it's like vertebrates vertebrates

172

00:08:37,909 --> 00:08:33,900

appeared with it with a sort of basic

173

00:08:42,890 --> 00:08:37,919

you know vertebrate four-on-the-floor

174

00:08:45,970 --> 00:08:42,900

kind of body plan yeah back in the late

175

00:08:48,500 --> 00:08:45,980

cretaceous early seneca cenozoic and

176

00:08:50,960 --> 00:08:48,510

there have been all these variations on

177

00:08:54,079 --> 00:08:50,970

that theme well you know ultimately the

178

00:08:57,350 --> 00:08:54,089

body plan of creationism is special

179

00:08:59,930 --> 00:08:57,360

creation that God specially created he

180

00:09:02,420 --> 00:08:59,940

poofed things into existence now with

181

00:09:04,970 --> 00:09:02,430

the with the young earth creationist

182

00:09:07,790 --> 00:09:04,980

like your beloved Ken Ham exported to us

183

00:09:08,990 --> 00:09:07,800

that's right I've forgiven you thank you

184

00:09:11,070 --> 00:09:09,000

very much well we've had a lot of

185

00:09:13,290 --> 00:09:11,080

American imports early as I

186

00:09:17,400 --> 00:09:13,300

promise you that I mean where was the

187

00:09:21,330 --> 00:09:17,410

mind poisoned I mean but young earth

188

00:09:23,490 --> 00:09:21,340

creationist like Ken Ham take a very

189

00:09:26,310 --> 00:09:23,500

strict special creation point of view

190

00:09:29,280 --> 00:09:26,320

that God really proved everything into

191

00:09:32,190 --> 00:09:29,290

existence and basically one step so it's

192

00:09:34,410 --> 00:09:32,200

just over six days but the really short

193

00:09:37,050 --> 00:09:34,420

days so there was an awful lot of

194

00:09:38,640 --> 00:09:37,060

special creation of planets and galaxies

195

00:09:41,130 --> 00:09:38,650

and the whole shooting match and plans

196

00:09:43,020 --> 00:09:41,140

announced and the intelligent design

197

00:09:45,630 --> 00:09:43,030

people have kind of shifted their focus

198

00:09:47,670 --> 00:09:45,640

a bit most of them aren't special

199

00:09:50,310 --> 00:09:47,680

creationists and quite the same fashion

200

00:09:52,920 --> 00:09:50,320

but they are special creations to agree

201  
00:09:56,010 --> 00:09:52,930  
but they generally are focusing on god

202  
00:09:58,500 --> 00:09:56,020  
having to specially create the micro

203  
00:10:01,860 --> 00:09:58,510  
universe so to speak God doesn't have to

204  
00:10:03,450 --> 00:10:01,870  
specially create a whole galaxy but God

205  
00:10:05,820 --> 00:10:03,460  
does have two specially create the

206  
00:10:07,710 --> 00:10:05,830  
bacterial flagellum so it sort of seems

207  
00:10:09,990 --> 00:10:07,720  
like a concentration problem to me I

208  
00:10:12,690 --> 00:10:10,000  
mean but it's also it's interesting

209  
00:10:15,270 --> 00:10:12,700  
these people I guess people have been

210  
00:10:19,110 --> 00:10:15,280  
doing this for the millennia seems to

211  
00:10:21,630 --> 00:10:19,120  
know the mind of God so well yeah it's a

212  
00:10:28,520 --> 00:10:21,640  
it's not a very it's not a very modest

213  
00:10:31,410 --> 00:10:28,530

proposal isn't it sits in fact non

214

00:10:33,440 --> 00:10:31,420

biblical literalist Christians really

215

00:10:35,940 --> 00:10:33,450

considered that the ultimate of hubris

216

00:10:37,890 --> 00:10:35,950

they they they believed in a much more

217

00:10:40,190 --> 00:10:37,900

powerful God and in my conversations

218

00:10:44,760 --> 00:10:40,200

with them not one that has to be there

219

00:10:48,510 --> 00:10:44,770

candid with his biomolecular screwdriver

220

00:10:52,710 --> 00:10:48,520

fine-tuning a propeller yeah on a

221

00:10:56,340 --> 00:10:52,720

flagellum somehow this seems a little

222

00:10:58,860 --> 00:10:56,350

excessive but actually we had a we had a

223

00:11:01,350 --> 00:10:58,870

cover or the cover of the next issue of

224

00:11:04,170 --> 00:11:01,360

reports of NC SC that's coming out has

225

00:11:06,060 --> 00:11:04,180

as a cartoon of exactly that very point

226

00:11:09,150 --> 00:11:06,070

yeah you will you will receive it

227

00:11:11,760 --> 00:11:09,160

shortly I assume but it's a you know

228

00:11:14,250 --> 00:11:11,770

it's God standing there you may be

229

00:11:16,530 --> 00:11:14,260

standing on a cloud I'm not too sure but

230

00:11:20,700 --> 00:11:16,540

he's saying something like oh yes I

231

00:11:24,000 --> 00:11:20,710

created you know a hundred billion

232

00:11:24,310 --> 00:11:24,010

galaxies by natural causes but I had

233

00:11:26,620 --> 00:11:24,320

just

234

00:11:29,710 --> 00:11:26,630

actually create the bacteria that's good

235

00:11:32,560 --> 00:11:29,720

that's what can I say what are you going

236

00:11:34,330 --> 00:11:32,570

to miss I mean you can play colleague to

237

00:11:38,200 --> 00:11:34,340

colleague w guy aren't doing your chores

238

00:11:40,180 --> 00:11:38,210

at home but yeah I'm little known fact I

239

00:11:44,260 --> 00:11:40,190

really am a homebody I really like I

240

00:11:47,470 --> 00:11:44,270

really like you know cooking meals for

241

00:11:51,700 --> 00:11:47,480

people I like I could vouch for that I

242

00:11:53,850 --> 00:11:51,710

like gardening I like just making things

243

00:11:56,890 --> 00:11:53,860

work around the house and yeah I mean

244

00:11:59,080 --> 00:11:56,900

you know you've met my husband he's not

245

00:12:00,460 --> 00:11:59,090

he's disabled he's not really capable of

246

00:12:03,190 --> 00:12:00,470

doing a lot of the things that he

247

00:12:06,070 --> 00:12:03,200

previously did so those have fallen to

248

00:12:07,780 --> 00:12:06,080

me yeah and I've actually overcome a

249

00:12:11,080 --> 00:12:07,790

great deal of my fear of things like

250

00:12:12,730 --> 00:12:11,090

screwdrivers and electric drills and

251

00:12:15,970 --> 00:12:12,740

things like that and I'm coping

252

00:12:18,250 --> 00:12:15,980

remarkably well yeah but I'm a whole lot

253

00:12:21,880 --> 00:12:18,260

better with with kitchen tools than with

254

00:12:24,070 --> 00:12:21,890

carpentry tools just me but no I'll miss

255

00:12:26,650 --> 00:12:24,080

I'm just not seeing these people every

256

00:12:29,200 --> 00:12:26,660

day right because that's been a real

257

00:12:31,780 --> 00:12:29,210

treat I mean you know I get up in the

258

00:12:34,000 --> 00:12:31,790

morning and I look forward to coming to

259

00:12:35,770 --> 00:12:34,010

work mostly not just because the work is

260

00:12:38,080 --> 00:12:35,780

interesting but because the people I

261

00:12:42,370 --> 00:12:38,090

work with are just so super one of the

262

00:12:45,010 --> 00:12:42,380

things I think that you may miss or may

263

00:12:47,710 --> 00:12:45,020

not is in your position you've certainly

264

00:12:49,360 --> 00:12:47,720

done a lot of traffic my goodness me

265

00:12:52,950 --> 00:12:49,370

you've been around the world and around

266

00:12:56,680 --> 00:12:52,960

this country many times do you is that

267

00:12:59,950 --> 00:12:56,690

for you still a treat or is that sure

268

00:13:03,730 --> 00:12:59,960

you know the best thing about traveling

269

00:13:06,670 --> 00:13:03,740

is being there I mean it's the people

270

00:13:09,430 --> 00:13:06,680

that I meet the people that I see I have

271

00:13:12,700 --> 00:13:09,440

always been treated just wonderfully by

272

00:13:15,070 --> 00:13:12,710

my hosts they always make it you know

273

00:13:17,110 --> 00:13:15,080

much more of us than me but but you know

274

00:13:18,700 --> 00:13:17,120

I've always been greeted very warmly and

275

00:13:21,010 --> 00:13:18,710

my ideas have been appreciated and

276

00:13:23,830 --> 00:13:21,020

that's great that's great I'm still

277

00:13:27,550 --> 00:13:23,840

going to continue traveling i'm still

278

00:13:30,520 --> 00:13:27,560

going to continue speaking the

279

00:13:33,540 --> 00:13:30,530

difference is that I I will be trying to

280

00:13:36,090 --> 00:13:33,550

pass well I have been trying for the

281

00:13:38,730 --> 00:13:36,100

several years really to try to pass more

282

00:13:40,710 --> 00:13:38,740

invitations on to my staff because they

283

00:13:43,759 --> 00:13:40,720

are very good they should be recognized

284

00:13:46,199 --> 00:13:43,769

for their abilities and also because I

285

00:13:48,860 --> 00:13:46,209

you know I mean I still have some shelf

286

00:13:52,230 --> 00:13:48,870

life available to me for a while but

287

00:13:54,090 --> 00:13:52,240

yeah there will come a time when they're

288

00:13:56,400 --> 00:13:54,100

going to be much better versed in what's

289

00:13:58,259 --> 00:13:56,410

going on then I cuz they're here it must

290

00:14:00,569 --> 00:13:58,269

happen that's I guess it might happen

291

00:14:02,940 --> 00:14:00,579

I'm okay with it yeah you know yeah I

292

00:14:04,560 --> 00:14:02,950

can see a point because unless you're

293

00:14:06,389 --> 00:14:04,570

here on the front line as it was there

294

00:14:08,850 --> 00:14:06,399

gonna be news items and things that you

295

00:14:10,410 --> 00:14:08,860

you just can't keep up and you know that

296

00:14:13,050 --> 00:14:10,420

the flare-ups that we deal with a lot of

297

00:14:16,590 --> 00:14:13,060

those never do see the light of day I

298

00:14:19,980 --> 00:14:16,600

mean obviously I'll you know I I put too

299

00:14:21,870 --> 00:14:19,990

much into this organization to just

300

00:14:24,420 --> 00:14:21,880

abandon it I'm obviously going to help

301  
00:14:28,079 --> 00:14:24,430  
out however I can to you know keep the

302  
00:14:29,850 --> 00:14:28,089  
organization strong and doing well but a

303  
00:14:31,319 --> 00:14:29,860  
lot of the you know a lot of the travel

304  
00:14:33,600 --> 00:14:31,329  
a lot of the speaking that I've been

305  
00:14:36,509 --> 00:14:33,610  
doing on behalf of in CSC is going to

306  
00:14:39,420 --> 00:14:36,519  
diminish yeah but i still have my

307  
00:14:42,300 --> 00:14:39,430  
interest in the skeptics you know i

308  
00:14:46,889 --> 00:14:42,310  
still have I'm still in a couple of

309  
00:14:49,139 --> 00:14:46,899  
boards that require me to travel I've

310  
00:14:51,900 --> 00:14:49,149  
been fairly careful and not accepting

311  
00:14:55,829 --> 00:14:51,910  
some invitations to serve on boards and

312  
00:14:57,930 --> 00:14:55,839  
things because I I really do want I want

313  
00:14:59,639 --> 00:14:57,940

to kind of stand back for six months or

314

00:15:03,210 --> 00:14:59,649

so and say okay you know what do I want

315

00:15:08,550 --> 00:15:03,220

to do when I grow up yeah where do I go

316

00:15:11,730 --> 00:15:08,560

from here and I I think I i will

317

00:15:15,090 --> 00:15:11,740

probably spend more time with with the

318

00:15:19,380 --> 00:15:15,100

skeptics movements because it in one

319

00:15:21,180 --> 00:15:19,390

sense it's kind of the root of most of

320

00:15:22,710 --> 00:15:21,190

what I've been doing I guess says I

321

00:15:24,990 --> 00:15:22,720

guess it's a straight up like

322

00:15:27,630 --> 00:15:25,000

understanding changes yeah yeah because

323

00:15:29,610 --> 00:15:27,640

it's everything and sometimes it can

324

00:15:30,810 --> 00:15:29,620

feel a little overwhelming we have an

325

00:15:32,130 --> 00:15:30,820

interesting list on the Australian

326

00:15:37,519 --> 00:15:32,140

skeptics website of things we're

327

00:15:40,079 --> 00:15:37,529

skeptical of Etsy its extensive and uh

328

00:15:41,850 --> 00:15:40,089

you can't know it all and you can't

329

00:15:44,819 --> 00:15:41,860

specialize in

330

00:15:47,880 --> 00:15:44,829

and I specialized in one area yes yeah

331

00:15:50,850 --> 00:15:47,890

and I'm pretty good at it other people

332

00:15:52,319 --> 00:15:50,860

also are very good at this this area but

333

00:15:54,150 --> 00:15:52,329

it's not that I'm going to suddenly

334

00:15:56,460 --> 00:15:54,160

become a Bigfoot specialist or something

335

00:15:59,250 --> 00:15:56,470

like that what I really want to do

336

00:16:00,900 --> 00:15:59,260

whatever yeah I big foots cray I'm a

337

00:16:02,280 --> 00:16:00,910

physical anthropologist of course I'm

338

00:16:06,930 --> 00:16:02,290

going to be of course I'm gonna love

339

00:16:09,600 --> 00:16:06,940

Bigfoot can't can't turn Lewis um but

340

00:16:12,360 --> 00:16:09,610

but it's really the public understanding

341

00:16:14,690 --> 00:16:12,370

of science it's really helping people

342

00:16:18,030 --> 00:16:14,700

understand science as a way of knowing

343

00:16:21,360 --> 00:16:18,040

why it is such a unique and valuable way

344

00:16:24,810 --> 00:16:21,370

of knowing and quite frankly why it is

345

00:16:29,699 --> 00:16:24,820

not a philosophy of life yeah i'm also a

346

00:16:31,829 --> 00:16:29,709

humanist and I'm a after a while I may

347

00:16:35,310 --> 00:16:31,839

be speaking more about some of my

348

00:16:37,710 --> 00:16:35,320

personal views I have avoided that as a

349

00:16:40,680 --> 00:16:37,720

as the director of NCIC because it's

350

00:16:42,960 --> 00:16:40,690

confusing to people there's been enough

351

00:16:45,720 --> 00:16:42,970

confusion already with the fact that we

352

00:16:49,500 --> 00:16:45,730

deal with evolution and the assumption

353

00:16:52,740 --> 00:16:49,510

on some by some parties that therefore

354

00:16:55,530 --> 00:16:52,750

we must therefore be a bunch of atheists

355

00:16:57,960 --> 00:16:55,540

and you know and so I've had to work

356

00:17:01,110 --> 00:16:57,970

very hard at combating that and it's a

357

00:17:02,880 --> 00:17:01,120

constant struggle that will continue and

358

00:17:04,650 --> 00:17:02,890

of course it's it's nonsense because we

359

00:17:06,900 --> 00:17:04,660

are not officially any kind of

360

00:17:11,039 --> 00:17:06,910

ideologically based organization except

361

00:17:13,020 --> 00:17:11,049

one that you know has the ideology that

362

00:17:13,919 --> 00:17:13,030

people should know science but I don't

363

00:17:15,840 --> 00:17:13,929

think that's going to be too

364

00:17:19,169 --> 00:17:15,850

objectionable by anyone well I hope not

365

00:17:20,939 --> 00:17:19,179

I mean our members are people who are

366

00:17:24,689 --> 00:17:20,949

believers and or not believers and

367

00:17:26,309 --> 00:17:24,699

people who don't care our staff consists

368

00:17:27,659 --> 00:17:26,319

of people who are believers people who

369

00:17:31,440 --> 00:17:27,669

are not believers and people who don't

370

00:17:33,990 --> 00:17:31,450

care and as far as what we do here we

371

00:17:37,020 --> 00:17:34,000

promote good science and good science

372

00:17:40,380 --> 00:17:37,030

education evolution and also the climate

373

00:17:44,340 --> 00:17:40,390

change issue yeah yeah and you know

374

00:17:48,409 --> 00:17:44,350

whatever personal opinions we have as

375

00:17:51,310 --> 00:17:48,419

individuals at ncsu staff or members

376

00:17:55,960 --> 00:17:51,320

they you know we are all united

377

00:17:57,669 --> 00:17:55,970

in in that bigger picture of how do we

378

00:17:59,620 --> 00:17:57,679

get the public to understand science

379

00:18:03,340 --> 00:17:59,630

understand evolution understand climate

380

00:18:05,889 --> 00:18:03,350

change and not object to good science

381

00:18:07,659 --> 00:18:05,899

being taught to their kids and that's

382

00:18:10,269 --> 00:18:07,669

really what you do around here yeah

383

00:18:12,669 --> 00:18:10,279

because over the years it's been an

384

00:18:16,269 --> 00:18:12,679

interesting it is such an interesting

385

00:18:18,669 --> 00:18:16,279

story and I'm sure in many years to come

386

00:18:21,759 --> 00:18:18,679

it'll be one of the classic studies of

387

00:18:24,249 --> 00:18:21,769

science this whole creation is all yeah

388

00:18:29,769 --> 00:18:24,259

I think in this country especially I

389

00:18:32,169 --> 00:18:29,779

think specially and its export now that

390

00:18:33,779 --> 00:18:32,179

I see some sort of pole in the media

391

00:18:36,340 --> 00:18:33,789

just the other day about the number of

392

00:18:38,320 --> 00:18:36,350

now I remember if it's number Americans

393

00:18:41,379 --> 00:18:38,330

or the number of Republicans who do both

394

00:18:43,749 --> 00:18:41,389

that was a new pupil yeah we posted it

395

00:18:49,450 --> 00:18:43,759

on our website that's why might a ported

396

00:18:53,649 --> 00:18:49,460

there and it it pretty much tracks the

397

00:18:57,580 --> 00:18:53,659

last pew and everybody else's poll of I

398

00:19:01,539 --> 00:18:57,590

think four or five years ago Americans

399

00:19:04,259 --> 00:19:01,549

have a high percentage of citizens who

400

00:19:07,119 --> 00:19:04,269

don't accept evolution certainly and

401  
00:19:10,570 --> 00:19:07,129  
Republicans reject evolution at higher

402  
00:19:13,360 --> 00:19:10,580  
levels than do Democrats it mainstream

403  
00:19:15,879 --> 00:19:13,370  
Christians accept evolution at a much

404  
00:19:17,680 --> 00:19:15,889  
higher level than do conservative

405  
00:19:21,419 --> 00:19:17,690  
Christians I mean there's all sorts of

406  
00:19:24,789 --> 00:19:21,429  
these subdivisions but overall the

407  
00:19:28,749 --> 00:19:24,799  
percentages of Americans who reject

408  
00:19:32,379 --> 00:19:28,759  
evolution is surprisingly high still

409  
00:19:33,879 --> 00:19:32,389  
yeah well as it very much over the user

410  
00:19:35,680 --> 00:19:33,889  
does it mean more or less consistent

411  
00:19:37,570 --> 00:19:35,690  
it's been pretty consistent it's been

412  
00:19:39,960 --> 00:19:37,580  
pretty much goes up a little bit goes

413  
00:19:43,360 --> 00:19:39,970

down a little bit kind of within the the

414

00:19:45,369 --> 00:19:43,370

it's amazing staying power hasn't it

415

00:19:47,409 --> 00:19:45,379

when you think about it as we progress

416

00:19:50,049 --> 00:19:47,419

through the years and science marches on

417

00:19:52,360 --> 00:19:50,059

and it's all the things that are

418

00:19:57,539 --> 00:19:52,370

discovered about evolution yeah yeah and

419

00:19:59,950 --> 00:19:57,549

yet is it isn't that a lot of people

420

00:20:01,840 --> 00:19:59,960

after all your experience you must have

421

00:20:02,750 --> 00:20:01,850

an inkling isn't distasteful for a lot

422

00:20:07,020 --> 00:20:02,760

of people

423

00:20:09,210 --> 00:20:07,030

part of the problem is the structure of

424

00:20:13,650 --> 00:20:09,220

religion in the u.s. a much higher

425

00:20:18,210 --> 00:20:13,660

degree of adherence to religion than in

426

00:20:20,370 --> 00:20:18,220

Europe say Australia is close but you

427

00:20:23,100 --> 00:20:20,380

have fewer lower percentage of people

428

00:20:24,570 --> 00:20:23,110

who identify themselves as religious but

429

00:20:26,640 --> 00:20:24,580

it's the structure more than anything

430

00:20:29,159 --> 00:20:26,650

else not just the number not just the

431

00:20:31,380 --> 00:20:29,169

percentage America has a much more

432

00:20:33,240 --> 00:20:31,390

conservative kind of Christianity in

433

00:20:35,250 --> 00:20:33,250

general and in a much higher proportion

434

00:20:36,960 --> 00:20:35,260

of American Christians are conservative

435

00:20:39,350 --> 00:20:36,970

Christians than you find elsewhere hmm

436

00:20:42,780 --> 00:20:39,360

after all it was in this country that

437

00:20:45,060 --> 00:20:42,790

new with its entrepreneurial spirit goes

438

00:20:47,580 --> 00:20:45,070

to religions as well there's an awful

439

00:20:49,409 --> 00:20:47,590

lot of conservative religions religious

440

00:20:51,860 --> 00:20:49,419

denominations that were founded here

441

00:20:56,640 --> 00:20:51,870

including the you know the general

442

00:21:01,470 --> 00:20:56,650

fundamentalist strain of Christianity

443

00:21:03,530 --> 00:21:01,480

but also charismatic so various kinds

444

00:21:08,640 --> 00:21:03,540

Pentecostal this of various kinds

445

00:21:11,640 --> 00:21:08,650

Jehovah's Witnesses notice the list goes

446

00:21:15,890 --> 00:21:11,650

on not and those tend to be more more

447

00:21:18,480 --> 00:21:15,900

biblically based and that is the problem

448

00:21:21,030 --> 00:21:18,490

we have a more conservative form of

449

00:21:24,840 --> 00:21:21,040

America of Christianity in the United

450

00:21:28,830 --> 00:21:24,850

States but we also don't do that great a

451

00:21:31,860 --> 00:21:28,840

job in teaching evolution and so you

452

00:21:35,100 --> 00:21:31,870

know if evolution is is just given kind

453

00:21:39,840 --> 00:21:35,110

of a little once over or not spoken of

454

00:21:44,610 --> 00:21:39,850

it all and and the did the strength of

455

00:21:46,350 --> 00:21:44,620

evolution as the foundation for biology

456

00:21:51,360 --> 00:21:46,360

and geology if that's not clearly

457

00:21:53,100 --> 00:21:51,370

confirmed akita to students and the high

458

00:21:57,000 --> 00:21:53,110

proportion of them come into the class

459

00:22:00,000 --> 00:21:57,010

already with the idea that there's

460

00:22:02,669 --> 00:22:00,010

something you know if I accept evolution

461

00:22:05,940 --> 00:22:02,679

I'm going to lose really big yes it's

462

00:22:08,940 --> 00:22:05,950

yet a surprise they will find that you

463

00:22:10,649 --> 00:22:08,950

find not very many people accepting

464

00:22:12,690 --> 00:22:10,659

evolution interesting is that that that

465

00:22:17,550 --> 00:22:12,700

almost it's a black male

466

00:22:20,280 --> 00:22:17,560

way well it's it's it's not just

467

00:22:22,290 --> 00:22:20,290

blackmail I mean it's it's the

468

00:22:25,680 --> 00:22:22,300

expectation that you would have whatever

469

00:22:27,930 --> 00:22:25,690

your ideology I mean you know religion

470

00:22:32,610 --> 00:22:27,940

as a type of ideology politics is a type

471

00:22:35,310 --> 00:22:32,620

of ideology economics can be ideological

472

00:22:38,670 --> 00:22:35,320

as well one thing we found with the

473

00:22:45,090 --> 00:22:38,680

climate change situation is that people

474

00:22:48,780 --> 00:22:45,100

who believe that if global warming is

475

00:22:50,430 --> 00:22:48,790

actually taking place that means that

476

00:22:51,930 --> 00:22:50,440

the government is going to be given more

477

00:22:54,450 --> 00:22:51,940

power there's going to be more

478

00:22:56,010 --> 00:22:54,460

centralization of government it's going

479

00:22:59,520 --> 00:22:56,020

to impinge upon American individualism

480

00:23:02,250 --> 00:22:59,530

and yeah there they have an ideological

481

00:23:04,380 --> 00:23:02,260

reason to a to reject languages well

482

00:23:06,030 --> 00:23:04,390

there's a huge I've just been looking at

483

00:23:09,540 --> 00:23:06,040

the papers recently from Australia and

484

00:23:12,180 --> 00:23:09,550

there's this huge debate my guess is a

485

00:23:13,890 --> 00:23:12,190

huge debate about some economic advisor

486

00:23:15,600 --> 00:23:13,900

coming in the papers and saying how

487

00:23:18,990 --> 00:23:15,610

climate change and then we've been old

488

00:23:21,120 --> 00:23:19,000

off elder ransom about it and it's you

489

00:23:23,670 --> 00:23:21,130

know social ruin an economic route and

490

00:23:25,610 --> 00:23:23,680

you've heard about this this trip to the

491

00:23:28,350 --> 00:23:25,620

Antarctic that was young in the ice and

492

00:23:30,270 --> 00:23:28,360

I was listening to some radio from back

493

00:23:31,920 --> 00:23:30,280

home and the announcers crowing saying

494

00:23:33,360 --> 00:23:31,930

are these foolish scientists went down

495

00:23:35,610 --> 00:23:33,370

there to check on climate change they've

496

00:23:37,680 --> 00:23:35,620

got frozen in the ice you know the eyes

497

00:23:41,580 --> 00:23:37,690

therefore therefore the Ice Age is

498

00:23:45,570 --> 00:23:41,590

coming more fool them you know people

499

00:23:48,170 --> 00:23:45,580

really don't get it you're about about

500

00:23:51,300 --> 00:23:48,180

the southern hemisphere so we see

501  
00:23:53,250 --> 00:23:51,310  
there's two kinds of ice in the South

502  
00:23:55,200 --> 00:23:53,260  
Pole there's the land ice and there's

503  
00:23:59,850 --> 00:23:55,210  
the sea ice they don't behave the same

504  
00:24:01,710 --> 00:23:59,860  
the land ice is melting like crazy the

505  
00:24:04,530 --> 00:24:01,720  
sea ice is actually increasing slightly

506  
00:24:06,600 --> 00:24:04,540  
and if you only focus on the sea ice and

507  
00:24:08,070 --> 00:24:06,610  
that on the reason why the sea ice is

508  
00:24:10,800 --> 00:24:08,080  
increasing you're going to miss the

509  
00:24:12,330 --> 00:24:10,810  
point and of course the anti global

510  
00:24:15,090 --> 00:24:12,340  
warming people aren't for doing

511  
00:24:17,250 --> 00:24:15,100  
precisely that but what's happening with

512  
00:24:20,940 --> 00:24:17,260  
the sea ice and the reason why it's

513  
00:24:23,100 --> 00:24:20,950

building up is actually partly a result

514

00:24:24,840 --> 00:24:23,110

of the melting of the land lies ice

515

00:24:26,190 --> 00:24:24,850

because the land ice is of course

516

00:24:29,580 --> 00:24:26,200

freshwater

517

00:24:32,250 --> 00:24:29,590

densities they mix differently they have

518

00:24:36,060 --> 00:24:32,260

different temperatures and you're

519

00:24:40,860 --> 00:24:36,070

getting a that plus the the currents and

520

00:24:44,070 --> 00:24:40,870

the winds in the polar region influence

521

00:24:46,560 --> 00:24:44,080

the building up the stacking ice the

522

00:24:51,840 --> 00:24:46,570

stacking up of the sea ice and then that

523

00:24:53,910 --> 00:24:51,850

of course exposes more surface of the

524

00:24:56,220 --> 00:24:53,920

water which then freezes and then gets

525

00:24:58,770 --> 00:24:56,230

blown up and so it looks like the sea

526

00:25:02,700 --> 00:24:58,780

ice is actually building up but actually

527

00:25:05,880 --> 00:25:02,710

the whole area is is severely melting in

528

00:25:09,210 --> 00:25:05,890

the land ice that the big Antarctic ice

529

00:25:12,120 --> 00:25:09,220

sheets are melting very very quickly not

530

00:25:14,430 --> 00:25:12,130

quite as fast is the polar ice cap the

531

00:25:17,790 --> 00:25:14,440

North Pole which is even more stunning

532

00:25:19,830 --> 00:25:17,800

in its in its changes no it's it's I've

533

00:25:22,290 --> 00:25:19,840

read some of the same new denialist oh

534

00:25:25,010 --> 00:25:22,300

yes giggling oh it's so easy they got

535

00:25:28,110 --> 00:25:25,020

caught it's so easy for them to do and

536

00:25:30,960 --> 00:25:28,120

it's irrelevant and that it is like that

537

00:25:33,330 --> 00:25:30,970

made this huge point and the silly

538

00:25:37,320 --> 00:25:33,340

scientists look with we want their so

539

00:25:40,500 --> 00:25:37,330

embarrassed down there it's it's I guess

540

00:25:43,950 --> 00:25:40,510

it's it's reflected having the two areas

541

00:25:45,600 --> 00:25:43,960

that the NCSE are involved with crazy

542

00:25:48,780 --> 00:25:45,610

mirrors of each other and we're not

543

00:25:51,060 --> 00:25:48,790

exactly yeah yeah but you know that the

544

00:25:53,100 --> 00:25:51,070

you're you're talking about the article

545

00:25:58,230 --> 00:25:53,110

or the news report that you heard about

546

00:26:01,980 --> 00:25:58,240

the climate change critic crowing about

547

00:26:04,560 --> 00:26:01,990

the the scientists tiny ice spin is

548

00:26:08,070 --> 00:26:04,570

everything you know you can take the

549

00:26:10,530 --> 00:26:08,080

same event the same evidence and you

550

00:26:13,520 --> 00:26:10,540

spin it according to whatever your

551  
00:26:19,560 --> 00:26:13,530  
ideological presupposition is there and

552  
00:26:21,990 --> 00:26:19,570  
you can make political hay this is the

553  
00:26:24,630 --> 00:26:22,000  
actual science that undergirds all of

554  
00:26:28,380 --> 00:26:24,640  
these claims is actually very clear and

555  
00:26:32,940 --> 00:26:28,390  
it's very alarming actually and it's

556  
00:26:36,510 --> 00:26:32,950  
it's not questionable I was um were

557  
00:26:38,300 --> 00:26:36,520  
we're taping this in january 2014 and in

558  
00:26:40,610 --> 00:26:38,310  
February of 2014

559  
00:26:43,490 --> 00:26:40,620  
bill nye the science guy was a very

560  
00:26:45,470 --> 00:26:43,500  
popular entertainer here and science

561  
00:26:47,900 --> 00:26:45,480  
communicator used to have a kids show

562  
00:26:51,650 --> 00:26:47,910  
for many years you probably can get it

563  
00:26:53,630 --> 00:26:51,660

on various kinds of international

564

00:26:55,490 --> 00:26:53,640

sources bill not science guy you're

565

00:26:57,860 --> 00:26:55,500

probably familiar with it as well I make

566

00:27:00,170 --> 00:26:57,870

bill a couple years back and it is

567

00:27:02,330 --> 00:27:00,180

heaven knows where he's very keen out

568

00:27:04,250 --> 00:27:02,340

with skeptics activities so he's been to

569

00:27:06,110 --> 00:27:04,260

a number of skeptics programs I told him

570

00:27:07,850 --> 00:27:06,120

the PAL balanced riggs excellent oh very

571

00:27:10,670 --> 00:27:07,860

good yep it does it he should credit

572

00:27:13,520 --> 00:27:10,680

Mason dancing and this is something I

573

00:27:17,750 --> 00:27:13,530

learned from the Australians okay but

574

00:27:20,480 --> 00:27:17,760

bill is scheduled to debate our beloved

575

00:27:23,540 --> 00:27:20,490

ken ham Karen han and that's going to

576

00:27:28,250 --> 00:27:23,550

take place in February as scheduled and

577

00:27:33,860 --> 00:27:28,260

I was looking at a video tape that was

578

00:27:36,020 --> 00:27:33,870

online of Bill Nye debating one of the

579

00:27:39,410 --> 00:27:36,030

climate change denier people earlier and

580

00:27:41,510 --> 00:27:39,420

boy talk about the Gish Gallup the

581

00:27:43,190 --> 00:27:41,520

climate the climate game anyway he was

582

00:27:45,320 --> 00:27:43,200

doing a gift Gallup which of course is a

583

00:27:47,920 --> 00:27:45,330

phrase that we use to describe how

584

00:27:50,510 --> 00:27:47,930

creationists debate by throwing out

585

00:27:53,030 --> 00:27:50,520

factoids after factoids after factoid

586

00:27:55,250 --> 00:27:53,040

most of which have some sort of grain of

587

00:28:00,140 --> 00:27:55,260

truth but piled higher and higher and

588

00:28:03,050 --> 00:28:00,150

higher produce the spin that evolution

589

00:28:05,150 --> 00:28:03,060

is terrible science even though each of

590

00:28:06,680 --> 00:28:05,160

these claims can be refuted and have

591

00:28:10,010 --> 00:28:06,690

been reviewed and I have been long

592

00:28:12,170 --> 00:28:10,020

refuted and their distortions of the

593

00:28:14,840 --> 00:28:12,180

science in most cases anyway well that

594

00:28:17,270 --> 00:28:14,850

was the same that this climate science

595

00:28:22,690 --> 00:28:17,280

denial was doing he was tossing out this

596

00:28:27,170 --> 00:28:22,700

idea that it hasn't warmed in 15 years

597

00:28:29,840 --> 00:28:27,180

if you measure from 1998 to the present

598

00:28:32,690 --> 00:28:29,850

there's a there's a slight decline in

599

00:28:35,900 --> 00:28:32,700

temperature because 1998 was the super

600

00:28:39,110 --> 00:28:35,910

El Nino year and it was it was just

601  
00:28:43,040 --> 00:28:39,120  
unusually unusually warm el nene

602  
00:28:45,140 --> 00:28:43,050  
apartment and so they cherry pick that

603  
00:28:46,610 --> 00:28:45,150  
particular little statistic and then

604  
00:28:49,460 --> 00:28:46,620  
everything of course looks like it's

605  
00:28:51,650 --> 00:28:49,470  
regular whereas if you actually look at

606  
00:28:53,930 --> 00:28:51,660  
the trend if you actually plot the

607  
00:28:56,570 --> 00:28:53,940  
pitchers across the last 30 years it's

608  
00:28:59,120 --> 00:28:56,580  
clear that the line is going up it's

609  
00:29:01,790 --> 00:28:59,130  
gone straight up but if you only cherry

610  
00:29:05,750 --> 00:29:01,800  
pick that one little 1998 date and look

611  
00:29:07,760 --> 00:29:05,760  
at it reference to the present oh look

612  
00:29:09,380 --> 00:29:07,770  
we have a plateau well you can find

613  
00:29:11,540 --> 00:29:09,390

plateaus all the way through that

614

00:29:13,790 --> 00:29:11,550

30-year segment but that doesn't mean

615

00:29:16,310 --> 00:29:13,800

that that it's the services aren't

616

00:29:23,720 --> 00:29:16,320

getting warmer what what would it take

617

00:29:26,000 --> 00:29:23,730

to to sway them just going to have to be

618

00:29:28,310 --> 00:29:26,010

the evidence around them but we might

619

00:29:31,160 --> 00:29:28,320

have to say about the creationist could

620

00:29:32,450 --> 00:29:31,170

we not at all yeah if you think you're

621

00:29:35,150 --> 00:29:32,460

going to solve the climate change

622

00:29:38,180 --> 00:29:35,160

problem by shoveling more science at it

623

00:29:40,460 --> 00:29:38,190

you don't understand the problem it's

624

00:29:43,940 --> 00:29:40,470

like we were talking about earlier the

625

00:29:45,680 --> 00:29:43,950

reason why people reject good science of

626  
00:29:50,690 --> 00:29:45,690  
evolution good science of climate change

627  
00:29:53,300 --> 00:29:50,700  
is because of their ideologies if

628  
00:29:55,520 --> 00:29:53,310  
evolution is true if climate change is

629  
00:29:57,500 --> 00:29:55,530  
true in some fashion rather they lose

630  
00:29:59,810 --> 00:29:57,510  
big so if you're going to persuade

631  
00:30:02,750 --> 00:29:59,820  
somebody you have to first assuage that

632  
00:30:05,660 --> 00:30:02,760  
concern you have to make that person

633  
00:30:08,660 --> 00:30:05,670  
feel comfortable okay if evolution is

634  
00:30:11,840 --> 00:30:08,670  
true maybe I won't lose big okay what's

635  
00:30:16,310 --> 00:30:11,850  
the evidence and we've tried to do that

636  
00:30:18,500 --> 00:30:16,320  
for 30 years at NCSE by accurately

637  
00:30:21,290 --> 00:30:18,510  
pointing out the fact that not all

638  
00:30:23,840 --> 00:30:21,300

Christians you know look at evolution as

639

00:30:25,340 --> 00:30:23,850

the enemy many of manage to integrate it

640

00:30:27,740 --> 00:30:25,350

into their theology similarly with

641

00:30:31,430 --> 00:30:27,750

climate change if you can help assuage

642

00:30:34,250 --> 00:30:31,440

this concern that somehow I'm going to

643

00:30:39,110 --> 00:30:34,260

lose my individual American freedoms

644

00:30:42,290 --> 00:30:39,120

whatever that is or somehow a more

645

00:30:46,460 --> 00:30:42,300

benign position that some deniers take I

646

00:30:49,700 --> 00:30:46,470

don't know how seriously but that unless

647

00:30:53,780 --> 00:30:49,710

we have carbon sources of energy we will

648

00:30:55,340 --> 00:30:53,790

not be able to to lift up the the poor

649

00:30:58,210 --> 00:30:55,350

and downtrodden and the people who are

650

00:31:02,110 --> 00:30:58,220

hungry and sick and and so forth around

651  
00:31:03,850 --> 00:31:02,120  
well you know if you can assuage those

652  
00:31:06,279 --> 00:31:03,860  
concerns whatever they are but they are

653  
00:31:07,779 --> 00:31:06,289  
ideologically based and you have to

654  
00:31:10,560 --> 00:31:07,789  
assuage those concerns before the

655  
00:31:13,330 --> 00:31:10,570  
science even gets listen to yeah yeah

656  
00:31:15,190 --> 00:31:13,340  
once you get people to get the fingers

657  
00:31:17,470 --> 00:31:15,200  
out of the years sufficiently to listen

658  
00:31:19,210 --> 00:31:17,480  
to the science then you got a really

659  
00:31:21,760 --> 00:31:19,220  
good chance because the science is under

660  
00:31:25,210 --> 00:31:21,770  
say there's no question that the science

661  
00:31:28,510 --> 00:31:25,220  
is on our side yeah yeah what again it's

662  
00:31:31,270 --> 00:31:28,520  
these two streams that you're fighting

663  
00:31:33,070 --> 00:31:31,280

are so similar in so many ways it's

664

00:31:37,000 --> 00:31:33,080

quite interesting that's why we took

665

00:31:42,549 --> 00:31:37,010

them out yeah yeah because they we were

666

00:31:46,299 --> 00:31:42,559

struck by how the ideological basis

667

00:31:48,460 --> 00:31:46,309

which undergirds the rejection of solid

668

00:31:50,770 --> 00:31:48,470

science with repercussions in the

669

00:31:55,029 --> 00:31:50,780

education system that kind of that the

670

00:31:56,940 --> 00:31:55,039

overarching framework there it was

671

00:31:59,500 --> 00:31:56,950

exactly the same for both the

672

00:32:02,409 --> 00:31:59,510

anti-evolution fight as well as the anti

673

00:32:04,299 --> 00:32:02,419

climate change fight and we felt that

674

00:32:07,240 --> 00:32:04,309

our experience in dealing with these

675

00:32:09,549 --> 00:32:07,250

issues in the evolution context might be

676  
00:32:10,930 --> 00:32:09,559  
helpful in helping teachers deal with

677  
00:32:16,029 --> 00:32:10,940  
these issues and the climate change

678  
00:32:17,830 --> 00:32:16,039  
context what's in your your time and

679  
00:32:19,320 --> 00:32:17,840  
this sort of we will get back to the

680  
00:32:21,730 --> 00:32:19,330  
original purpose which is the

681  
00:32:24,909 --> 00:32:21,740  
creationism what have been the biggest

682  
00:32:27,610 --> 00:32:24,919  
strides forward do you think the things

683  
00:32:31,440 --> 00:32:27,620  
that that you know that it worked really

684  
00:32:33,610 --> 00:32:31,450  
well and something you can build on well

685  
00:32:35,620 --> 00:32:33,620  
realizing fairly early in the game

686  
00:32:37,649 --> 00:32:35,630  
actually the the structure of the

687  
00:32:41,770 --> 00:32:37,659  
arguments that are raised against us

688  
00:32:43,390 --> 00:32:41,780

first of all attack the science the

689

00:32:45,940 --> 00:32:43,400

science is weak the science is not

690

00:32:48,039 --> 00:32:45,950

accepted by scientists you know this is

691

00:32:51,070 --> 00:32:48,049

all totally made out of Oh cloth but

692

00:32:53,560 --> 00:32:51,080

you've got to deal with it the second

693

00:32:56,289 --> 00:32:53,570

argument being an ideological argument

694

00:32:58,720 --> 00:32:56,299

you cannot be a good fill in the blank

695

00:33:00,340 --> 00:32:58,730

and still accept fill in the blank yeah

696

00:33:02,260 --> 00:33:00,350

you cannot be a good Republican without

697

00:33:03,399 --> 00:33:02,270

rejecting climate change you cannot be a

698

00:33:07,270 --> 00:33:03,409

good Christian without rejecting

699

00:33:10,659 --> 00:33:07,280

evolution and this dichotomous reasoning

700

00:33:12,970 --> 00:33:10,669

is what has been so toxic to

701  
00:33:14,379 --> 00:33:12,980  
you getting evolution accepted you know

702  
00:33:15,789 --> 00:33:14,389  
again if people think they're going to

703  
00:33:17,830 --> 00:33:15,799  
lose really big I've got to give up my

704  
00:33:19,599 --> 00:33:17,840  
faith in order to accept your science no

705  
00:33:22,210 --> 00:33:19,609  
way because my faith is really important

706  
00:33:25,840 --> 00:33:22,220  
to me and that's the way people so what

707  
00:33:28,169 --> 00:33:25,850  
you have to do is is present them with

708  
00:33:31,149 --> 00:33:28,179  
people who are of their same ideological

709  
00:33:33,369 --> 00:33:31,159  
persuasion who do accept it so you break

710  
00:33:35,109 --> 00:33:33,379  
apart that dichotomy so that people are

711  
00:33:37,060 --> 00:33:35,119  
not thinking I have to be on one side of

712  
00:33:39,519 --> 00:33:37,070  
that line or another show people

713  
00:33:41,619 --> 00:33:39,529

continua rather than dichotomies and

714

00:33:43,779 --> 00:33:41,629

we're doing that with the climate change

715

00:33:46,119 --> 00:33:43,789

thing as well there are Republicans who

716

00:33:50,379 --> 00:33:46,129

are green okay so it's a climate change

717

00:33:52,169 --> 00:33:50,389

they need to be made more their views

718

00:33:56,919 --> 00:33:52,179

need to be heard more frequently and

719

00:33:58,989 --> 00:33:56,929

then of course one position that

720

00:34:02,470 --> 00:33:58,999

resonates very strongly with Americans

721

00:34:04,180 --> 00:34:02,480

is the fairness idea well you know if

722

00:34:07,509 --> 00:34:04,190

you teach this just be fair and teach

723

00:34:09,309 --> 00:34:07,519

the other one and of course that's great

724

00:34:11,619 --> 00:34:09,319

one to come you know let all sides be

725

00:34:14,950 --> 00:34:11,629

heard and that's great when it comes to

726

00:34:17,649 --> 00:34:14,960

opinions but you know don't confuse

727

00:34:19,450 --> 00:34:17,659

science with opinion it's not a matter

728

00:34:22,149 --> 00:34:19,460

of opinion whether the earth goes around

729

00:34:24,129 --> 00:34:22,159

the Sun or the Sun goes my mirror and we

730

00:34:27,669 --> 00:34:24,139

don't teach both opinions and in a

731

00:34:29,289 --> 00:34:27,679

fourth grade class yeah we teach what is

732

00:34:31,569 --> 00:34:29,299

accepted science and that's really what

733

00:34:36,159 --> 00:34:31,579

we're doing the false balance yeah yes

734

00:34:37,960 --> 00:34:36,169

falls in love because it's so normally

735

00:34:40,180 --> 00:34:37,970

wired into the culture but and it's so

736

00:34:42,129 --> 00:34:40,190

easy for media to do that if they want a

737

00:34:44,829 --> 00:34:42,139

copper story quickly the report all has

738

00:34:46,480 --> 00:34:44,839

to ring up to opposing whatever freedom

739

00:34:50,169 --> 00:34:46,490

together faces and that's actually a

740

00:34:53,200 --> 00:34:50,179

good thing I mean I I don't balance is

741

00:34:55,389 --> 00:34:53,210

important false balance yes is what you

742

00:34:57,640 --> 00:34:55,399

have to watch right yeah and I mean if

743

00:34:58,990 --> 00:34:57,650

somebody says that this way is up you

744

00:35:00,730 --> 00:34:59,000

don't need to interview somebody else

745

00:35:02,799 --> 00:35:00,740

says this way you know the other

746

00:35:04,990 --> 00:35:02,809

direction is down hmm that's that's

747

00:35:08,319 --> 00:35:05,000

false balance yeah and you know

748

00:35:10,299 --> 00:35:08,329

basically when you get ninety-seven

749

00:35:11,829 --> 00:35:10,309

percent of the science community saying

750

00:35:13,720 --> 00:35:11,839

yeah living things share common

751

00:35:15,730 --> 00:35:13,730

ancestors you don't have to find those

752

00:35:18,400 --> 00:35:15,740

two percent of the scientists who say no

753

00:35:21,880 --> 00:35:18,410

they didn't when you have your spell did

754

00:35:23,860 --> 00:35:21,890

you hear they laughed at Galileo Oh

755

00:35:26,350 --> 00:35:23,870

laughter bozo the clown yes this is carl

756

00:35:28,510 --> 00:35:26,360

sagan said i love that he was so good

757

00:35:30,880 --> 00:35:28,520

wasn't it yeah yeah I was what

758

00:35:33,070 --> 00:35:30,890

inspiration continuing inspiration to

759

00:35:35,680 --> 00:35:33,080

look very much so and isn't it wonderful

760

00:35:37,600 --> 00:35:35,690

that there's gonna be a new cosmos yeah

761

00:35:39,340 --> 00:35:37,610

renew Giroud about it for a while now

762

00:35:41,140 --> 00:35:39,350

looking forward to seeing you know when

763

00:35:43,720 --> 00:35:41,150

that goes I don't know when it's going

764

00:35:46,060 --> 00:35:43,730

to be released but I will be looking at

765

00:35:47,920 --> 00:35:46,070

it very yeah with much interest and of

766

00:35:51,640 --> 00:35:47,930

course I think what that will do also is

767

00:35:54,070 --> 00:35:51,650

maybe inspire people to blow off the old

768

00:35:55,960 --> 00:35:54,080

videotapes that's good yeah I'm sure

769

00:35:57,460 --> 00:35:55,970

where I'm sure the original cosmos is

770

00:35:59,140 --> 00:35:57,470

online something I was just about to say

771

00:36:01,660 --> 00:35:59,150

just between you and me and thousands of

772

00:36:03,750 --> 00:36:01,670

listeners i think i think if you google

773

00:36:06,520 --> 00:36:03,760

cosmos carl sagan you could probably

774

00:36:08,590 --> 00:36:06,530

find it so maybe find it somewhere I

775

00:36:11,260 --> 00:36:08,600

wonder if Netflix as it what if no you

776

00:36:12,940 --> 00:36:11,270

know I think they'd is streamed it dies

777

00:36:15,280 --> 00:36:12,950

the map you guys think Netflix does

778

00:36:16,960 --> 00:36:15,290

might might be necessary to do that yeah

779

00:36:18,880 --> 00:36:16,970

I think well you mean get the new one

780

00:36:20,950 --> 00:36:18,890

the old one oh you're the old 1 i'm

781

00:36:22,810 --> 00:36:20,960

pretty sure that would be fun yeah if

782

00:36:26,560 --> 00:36:22,820

then people can have easy access to it

783

00:36:29,350 --> 00:36:26,570

yeah oh well GD Scott next time I come

784

00:36:31,150 --> 00:36:29,360

to visit I guess I can interview your UK

785

00:36:33,720 --> 00:36:31,160

least one and you know you can come by

786

00:36:37,090 --> 00:36:33,730

and visit me too I might make you buy

787

00:36:38,590 --> 00:36:37,100

that's the invitation I can't refuse GD

788

00:37:01,070 --> 00:36:38,600

Scott thanks very much it's so good to

789

00:37:07,970 --> 00:37:03,360

well here I am walking around the

790

00:37:09,750 --> 00:37:07,980

wonderful google campus area suburb

791

00:37:12,090 --> 00:37:09,760

subdivision whatever you'd like to call

792

00:37:14,640 --> 00:37:12,100

it in California I'm with Chris Rock

793

00:37:17,460 --> 00:37:14,650

Chris today hey guy Richard fellow

794

00:37:20,100 --> 00:37:17,470

Aussie who's here in this area have it

795

00:37:23,400 --> 00:37:20,110

always working walking this way and now

796

00:37:25,200 --> 00:37:23,410

you drop me a note you heard I was going

797

00:37:26,850 --> 00:37:25,210

to be in the bay area because we

798

00:37:28,770 --> 00:37:26,860

correspond it a little while ago you

799

00:37:31,020 --> 00:37:28,780

were in Japan and you came across power

800

00:37:34,800 --> 00:37:31,030

balance yes i did it was in a little way

801  
00:37:35,880 --> 00:37:34,810  
off I think it was her adjucha and I saw

802  
00:37:37,350 --> 00:37:35,890  
a whole heap of them there there was

803  
00:37:38,820 --> 00:37:37,360  
power balance and a couple of others and

804  
00:37:40,260 --> 00:37:38,830  
I thought this is something Richard

805  
00:37:42,660 --> 00:37:40,270  
might like so I found your email address

806  
00:37:45,960 --> 00:37:42,670  
and i sent you an email while i was

807  
00:37:47,940 --> 00:37:45,970  
still in tokyo and showed it to you yeah

808  
00:37:50,640 --> 00:37:47,950  
yeah i remembers I remember seeing the

809  
00:37:52,110 --> 00:37:50,650  
photograph it's funny I've in a box at

810  
00:37:53,730 --> 00:37:52,120  
home and I don't know what I'm gonna do

811  
00:37:56,730 --> 00:37:53,740  
with it I've probably got the world's

812  
00:37:59,670 --> 00:37:56,740  
biggest collection of these devices from

813  
00:38:01,260 --> 00:37:59,680

all around the world and I must say I'm

814

00:38:03,210 --> 00:38:01,270

walking around here in Google reminding

815

00:38:04,800 --> 00:38:03,220

me that Google once had one I don't know

816

00:38:06,660 --> 00:38:04,810

if you knew that Google had a power

817

00:38:08,970 --> 00:38:06,670

ballad they had a band it's a google

818

00:38:10,410 --> 00:38:08,980

with a google local okay did that claim

819

00:38:12,870 --> 00:38:10,420

that it helped you with anything i hope

820

00:38:14,940 --> 00:38:12,880

not i don't think they did it hopefully

821

00:38:16,800 --> 00:38:14,950

not it might have been probably just a

822

00:38:17,970 --> 00:38:16,810

fashion statement also with that bigger

823

00:38:20,010 --> 00:38:17,980

collection at home do you ever fall

824

00:38:24,210 --> 00:38:20,020

either you ever stumble no it's

825

00:38:26,400 --> 00:38:24,220

remarkable I'm in fact I can't fall over

826

00:38:27,750 --> 00:38:26,410

at all it everything's a breeze I've got

827

00:38:30,990 --> 00:38:27,760

more power and strength than the whole

828

00:38:34,350 --> 00:38:31,000

planet combiner but now that's quite an

829

00:38:35,640 --> 00:38:34,360

interesting story that hole how will

830

00:38:37,590 --> 00:38:35,650

just show you about it before because

831

00:38:39,780 --> 00:38:37,600

you really don't see them around

832

00:38:42,090 --> 00:38:39,790

although you can still find them yeah I

833

00:38:43,950 --> 00:38:42,100

saw some over here there was in sports

834

00:38:45,240 --> 00:38:43,960

store there was a big range of them I

835

00:38:46,860 --> 00:38:45,250

don't know if power balance was one of

836

00:38:48,450 --> 00:38:46,870

them but there was certainly at the

837

00:38:50,940 --> 00:38:48,460

front there waiting for people to buy

838

00:38:51,480 --> 00:38:50,950

them yeah so would you were in Japan you

839

00:38:53,520 --> 00:38:51,490

see

840

00:38:55,230 --> 00:38:53,530

came across these they would power

841

00:38:57,630 --> 00:38:55,240

balance so what know where that were

842

00:38:59,390 --> 00:38:57,640

power balance they were in English so I

843

00:39:02,070 --> 00:38:59,400

think they were straight imports ah

844

00:39:04,080 --> 00:39:02,080

right do you recall when you were there

845

00:39:05,520 --> 00:39:04,090

seeing like other knock offs or copies

846

00:39:06,990 --> 00:39:05,530

or similar sort of thing yes they were

847

00:39:08,550 --> 00:39:07,000

along with them there were a couple of

848

00:39:10,680 --> 00:39:08,560

other brands I don't remember what they

849

00:39:12,600 --> 00:39:10,690

were I think they were all in English I

850

00:39:15,300 --> 00:39:12,610

don't think the Japanese maybe had their

851  
00:39:18,170 --> 00:39:15,310  
own interesting interesting because I've

852  
00:39:20,760 --> 00:39:18,180  
not been to Japan since all 1969 answers

853  
00:39:23,370 --> 00:39:20,770  
yeah that's a while that's a while is /

854  
00:39:25,500 --> 00:39:23,380  
and I wonder how prevalent this sort of

855  
00:39:28,350 --> 00:39:25,510  
thinking is when you were in Japan did

856  
00:39:32,400 --> 00:39:28,360  
you have many things that raised a

857  
00:39:35,130 --> 00:39:32,410  
skeptical eyebrow um not really there

858  
00:39:37,109 --> 00:39:35,140  
there's a lot of atheists over there I

859  
00:39:39,620 --> 00:39:37,119  
suppose there's a lot of temples my my

860  
00:39:41,970 --> 00:39:39,630  
wife is Japanese and she goes and praise

861  
00:39:43,350 --> 00:39:41,980  
sometimes like when there's a test

862  
00:39:45,470 --> 00:39:43,360  
coming up for a relative or something

863  
00:39:47,550 --> 00:39:45,480

okay guys and get to one of those little

864

00:39:49,740 --> 00:39:47,560

scrolls and gives you talk to your

865

00:39:50,880 --> 00:39:49,750

future all right but apart from that I

866

00:39:54,060 --> 00:39:50,890

think the Japanese are a fairly

867

00:39:56,510 --> 00:39:54,070

skeptical one yeah yeah that's good to

868

00:39:59,160 --> 00:39:56,520

know because I've recently heard of a

869

00:40:00,720 --> 00:39:59,170

Japanese skeptics society or is it Tokyo

870

00:40:02,520 --> 00:40:00,730

skeptics in the pub something like that

871

00:40:04,230 --> 00:40:02,530

yeah yeah I think I heard of that when I

872

00:40:06,359 --> 00:40:04,240

was going over there I looked him up and

873

00:40:08,099 --> 00:40:06,369

I didn't manage to meet up with them but

874

00:40:11,220 --> 00:40:08,109

I think there are a few people over

875

00:40:12,870 --> 00:40:11,230

there who are the skeptical bent that's

876

00:40:16,170 --> 00:40:12,880

good to know it's because I was just too

877

00:40:17,730 --> 00:40:16,180

lovely day here it's a quite Barney for

878

00:40:19,530 --> 00:40:17,740

this time in the air to the middle of

879

00:40:24,500 --> 00:40:19,540

winter but it's lovely yeah just like

880

00:40:26,880 --> 00:40:24,510

back home yeah almost not 40 degree

881

00:40:30,750 --> 00:40:26,890

thank goodness for that as we pass her

882

00:40:32,609 --> 00:40:30,760

another row of Google bicycles yeah

883

00:40:34,080 --> 00:40:32,619

they're very good there are really get

884

00:40:36,150 --> 00:40:34,090

you around the campus as a lot of

885

00:40:37,380 --> 00:40:36,160

different buildings around here and it's

886

00:40:38,970 --> 00:40:37,390

nice to be able to hop on one and then

887

00:40:41,070 --> 00:40:38,980

hop off at the other end well Chris

888

00:40:44,910 --> 00:40:41,080

thank you very much for sparing some

889

00:40:47,550 --> 00:40:44,920

time you're very welcome and I wish you

890

00:41:00,460 --> 00:40:47,560

every future success thank you very much

891

00:41:05,320 --> 00:41:03,190

hi I'm Finn and I'm Rebecca and where

892

00:41:07,089 --> 00:41:05,330

the skipper cons skipper Collins is an

893

00:41:08,770 --> 00:41:07,099

Irish podcast by the Dublin skeptics

894

00:41:10,330 --> 00:41:08,780

society it takes a conversational

895

00:41:11,589 --> 00:41:10,340

reverent look at science news and

896

00:41:15,099 --> 00:41:11,599

skeptical topics from an Irish

897

00:41:20,350 --> 00:41:15,109

perspective you can find us at WWDC

898

00:41:26,720 --> 00:41:22,820

and now here's a little bit of news

899

00:41:29,510 --> 00:41:26,730

about the impending visit of dr. Simon

900

00:41:31,870 --> 00:41:29,520

Singh to Australia Simon's going to be

901  
00:41:35,630 --> 00:41:31,880  
speaking around the country including

902  
00:41:38,960 --> 00:41:35,640  
Sydney on Saturday the 11th of January

903  
00:41:42,160 --> 00:41:38,970  
at five pm at the crown hotel The

904  
00:41:45,080 --> 00:41:42,170  
Simpsons and their mathematical secrets

905  
00:41:48,410 --> 00:41:45,090  
Simon Singh best-selling author of

906  
00:41:50,240 --> 00:41:48,420  
thermos Last Theorem and the codebook

907  
00:41:52,400 --> 00:41:50,250  
that's a really good book i tellya the

908  
00:41:54,530 --> 00:41:52,410  
codebook it's fantastic we'll discuss

909  
00:41:56,900 --> 00:41:54,540  
his latest book The Simpsons and their

910  
00:41:59,300 --> 00:41:56,910  
mathematical secrets you can find out

911  
00:42:02,090 --> 00:41:59,310  
more by visiting the Australian skeptics

912  
00:42:05,060 --> 00:42:02,100  
Sydney skeptics in the pub meet up and

913  
00:42:08,090 --> 00:42:05,070

not long after that on the 17th of

914

00:42:12,020 --> 00:42:08,100

January at 4pm at the Japan theatre

915

00:42:15,170 --> 00:42:12,030

Questacon in Canberra Simon will be also

916

00:42:17,750 --> 00:42:15,180

giving that talk the simpsons and their

917

00:42:21,410 --> 00:42:17,760

mathematical secrets and you can find

918

00:42:24,560 --> 00:42:21,420

out more about that visit by googling

919

00:42:27,110 --> 00:42:24,570

canberra skeptics Canberra skeptics are

920

00:42:29,420 --> 00:42:27,120

also having a BBQ and a free screening

921

00:42:33,020 --> 00:42:29,430

of flock of dodos on sunday the

922

00:42:35,270 --> 00:42:33,030

nineteenth of january from one to three

923

00:42:38,210 --> 00:42:35,280

o'clock and that will also be the

924

00:42:46,190 --> 00:42:38,220

Questacon google Canberra skeptics for

925

00:42:47,660 --> 00:42:46,200

more information here's may not spooky

926  
00:42:51,620 --> 00:42:47,670  
action

927  
00:42:55,349 --> 00:42:53,760  
of course everyone's talking about

928  
00:42:56,820 --> 00:42:55,359  
conspiracies but a conspiracy that I was

929  
00:42:57,900 --> 00:42:56,830  
calling for years of course and no one

930  
00:43:00,750 --> 00:42:57,910  
ever listened to me was the fact that

931  
00:43:02,880 --> 00:43:00,760  
the NSA was spying on people even have

932  
00:43:04,950 --> 00:43:02,890  
floated this one with Steve how I am

933  
00:43:06,870 --> 00:43:04,960  
your cryptology is your thing isn't it

934  
00:43:08,880 --> 00:43:06,880  
it was yeah I've retired now that I was

935  
00:43:11,520 --> 00:43:08,890  
I was a code breaker in my time and I'm

936  
00:43:13,290 --> 00:43:11,530  
in peacetime this was another yeah I

937  
00:43:15,329 --> 00:43:13,300  
remember I was saying to you I was

938  
00:43:17,099 --> 00:43:15,339

pretty I had to be pretty sure the NSA

939

00:43:18,450 --> 00:43:17,109

could crack any code anywhere and you

940

00:43:20,849 --> 00:43:18,460

were saying that no matter how good you

941

00:43:23,070 --> 00:43:20,859

are you can't always do that now most of

942

00:43:24,900 --> 00:43:23,080

the codes are not crackable I mean the

943

00:43:26,400 --> 00:43:24,910

people who design codes of even sharp

944

00:43:28,560 --> 00:43:26,410

and the people who in fact them so the

945

00:43:30,030 --> 00:43:28,570

you can't crack the codes so is the case

946

00:43:31,980 --> 00:43:30,040

that the NSA has got this by using

947

00:43:33,540 --> 00:43:31,990

backdoor means rather than brute force

948

00:43:35,099 --> 00:43:33,550

cracking there's all sorts of ways of

949

00:43:37,079 --> 00:43:35,109

cheating like you planted bugs in the

950

00:43:39,300 --> 00:43:37,089

code machines or you bug the keyboard

951  
00:43:41,490 --> 00:43:39,310  
the people type on or you you've been to

952  
00:43:43,920 --> 00:43:41,500  
room upstairs they move it the room

953  
00:43:47,520 --> 00:43:43,930  
above the embassy and listen for noises

954  
00:43:49,800 --> 00:43:47,530  
you know people conversation everybody

955  
00:43:51,120 --> 00:43:49,810  
cheats all the time this is that the

956  
00:43:52,800 --> 00:43:51,130  
book put them the most bleeding obvious

957  
00:43:54,599 --> 00:43:52,810  
things it's the pyramids were built you

958  
00:43:57,420 --> 00:43:54,609  
know everybody spies and everybody else

959  
00:43:59,099 --> 00:43:57,430  
all the time and you shouldn't get

960  
00:44:01,650 --> 00:43:59,109  
caught but people do you know and

961  
00:44:03,270 --> 00:44:01,660  
there's famous incidents of sort of

962  
00:44:05,070 --> 00:44:03,280  
think the Russians crashed a submarine

963  
00:44:07,260 --> 00:44:05,080

on the coast of Sweden in under an 81

964

00:44:09,300 --> 00:44:07,270

and what what really annoys the Swedes

965

00:44:11,339 --> 00:44:09,310

was it was a very old and a scruffy

966

00:44:13,620 --> 00:44:11,349

submarine and they were going to be

967

00:44:15,020 --> 00:44:13,630

spied on by a more dignified submarine

968

00:44:16,760 --> 00:44:15,030

than that one

969

00:44:19,460 --> 00:44:16,770

and but what do you think is the

970

00:44:21,530 --> 00:44:19,470

simplest and most effective code you've

971

00:44:25,270 --> 00:44:21,540

heard of in all your years of cryptology

972

00:44:27,650 --> 00:44:25,280

a lot to kill you if I told you that

973

00:44:29,420 --> 00:44:27,660

because sometimes the simple ones are

974

00:44:30,800 --> 00:44:29,430

amazingly effective amp they are the

975

00:44:32,300 --> 00:44:30,810

most simple ones are the most effective

976

00:44:34,940 --> 00:44:32,310

if you make it more complicated like a

977

00:44:36,980 --> 00:44:34,950

bulk cedral you open up more chinks in

978

00:44:40,010 --> 00:44:36,990

it you know there's going to be a good

979

00:44:42,440 --> 00:44:40,020

design but actually I'm oh all modern

980

00:44:47,420 --> 00:44:42,450

commercial codes are pretty safe RSA in

981

00:44:49,490 --> 00:44:47,430

Triple D Azur safe eh ESS safe the best

982

00:44:52,760 --> 00:44:49,500

code for view and I'd assault with is a

983

00:44:54,680 --> 00:44:52,770

jargon code where you you don't talk

984

00:44:56,270 --> 00:44:54,690

about cocaine you talk about sugar or

985

00:44:57,830 --> 00:44:56,280

something you know all right have you

986

00:45:01,160 --> 00:44:57,840

got that packet of sugar from Colombia i

987

00:45:02,660 --> 00:45:01,170

sent you had a non a minute columbia

988

00:45:04,670 --> 00:45:02,670

isn't a sugar exporting nation people

989

00:45:07,340 --> 00:45:04,680

say I didn't mean can be i'm in time in

990

00:45:09,950 --> 00:45:07,350

some afghanistan no no no no go back on

991

00:45:11,540 --> 00:45:09,960

that even worse if a job and co where

992

00:45:13,280 --> 00:45:11,550

you just agree that would be in other

993

00:45:15,680 --> 00:45:13,290

words and nobody can crack that if you

994

00:45:17,510 --> 00:45:15,690

do it well and what do you think will be

995

00:45:19,970 --> 00:45:17,520

the most interesting conspiracy that

996

00:45:22,340 --> 00:45:19,980

will be brought to light here while

997

00:45:25,190 --> 00:45:22,350

we're in canberra this weekend water

998

00:45:26,540 --> 00:45:25,200

life yeah ivan brought to lie i mean is

999

00:45:27,500 --> 00:45:26,550

it one conspiracy you find very

1000

00:45:31,220 --> 00:45:27,510

interesting you're hoping they might

1001

00:45:33,110 --> 00:45:31,230

talk about oh yeah love so you're hiding

1002

00:45:34,400 --> 00:45:33,120

figures on climate change probably over

1003

00:45:36,860 --> 00:45:34,410

that's some of the ones begin to be

1004

00:45:39,440 --> 00:45:36,870

discovered in that he wants to find that

1005

00:45:41,060 --> 00:45:39,450

and there's a danger here if you want to

1006

00:45:43,700 --> 00:45:41,070

find something there you will find it if

1007

00:45:45,590 --> 00:45:43,710

you will enough numbers you know what

1008

00:45:46,940 --> 00:45:45,600

about a conspiracy that appears to be

1009

00:45:49,490 --> 00:45:46,950

lacking in evidence that you personally

1010

00:45:51,370 --> 00:45:49,500

wouldn't mind if it was true Oh a free

1011

00:45:54,940 --> 00:45:51,380

beer the fee beer plot or something

1012

00:45:57,249 --> 00:45:54,950

you know how much more popular would Guy

1013

00:45:59,079 --> 00:45:57,259

Fawkes be if he'd had a free beer plot

1014

00:46:02,529 --> 00:45:59,089

instead of gunpowder he'd be even more

1015

00:46:03,759 --> 00:46:02,539

famous only way a guy fawkes had a you

1016

00:46:05,440 --> 00:46:03,769

know he had the most brilliant ideas

1017

00:46:08,019 --> 00:46:05,450

anybody was in the same place you say

1018

00:46:09,910 --> 00:46:08,029

you had to all the whole house of

1019

00:46:12,309 --> 00:46:09,920

commons the whole house of lords the

1020

00:46:15,309 --> 00:46:12,319

monarch all the bishops all the lords

1021

00:46:17,740 --> 00:46:15,319

everybody in one place you just cried

1022

00:46:19,509 --> 00:46:17,750

out for a bit of gunpowder and hit a

1023

00:46:21,849 --> 00:46:19,519

secure the locks in he had the gunpowder

1024

00:46:23,319 --> 00:46:21,859

and he didn't do it and I've i betchu it

1025

00:46:24,849 --> 00:46:23,329

as he was being drawn in quarter you

1026  
00:46:26,380 --> 00:46:24,859  
probably wish you Jesus maybe I should

1027  
00:46:27,249 --> 00:46:26,390  
have gone early on that one you should

1028  
00:46:28,980 --> 00:46:27,259  
have gone that you're the day before

1029  
00:46:31,539 --> 00:46:28,990  
would have been really good you know

1030  
00:46:34,029 --> 00:46:31,549  
have a good time here and what do you

1031  
00:46:36,069 --> 00:46:34,039  
look credible in what way is the camera

1032  
00:46:38,589 --> 00:46:36,079  
convention got a different feel this is

1033  
00:46:40,269 --> 00:46:38,599  
a very good venue it's inside csiro it's

1034  
00:46:42,490 --> 00:46:40,279  
built for education it's got good

1035  
00:46:43,749 --> 00:46:42,500  
facilities and good meeting room good

1036  
00:46:46,269 --> 00:46:43,759  
coffee or everything laid out very

1037  
00:46:48,220 --> 00:46:46,279  
accessible maybe advice and cheerful and

1038  
00:46:51,549 --> 00:46:48,230

not at all like that sort of dreaming

1039

00:46:53,140 --> 00:46:51,559

lecture halls on my youth obviously so

1040

00:46:55,420 --> 00:46:53,150

it's a lovely venue and the people of

1041

00:46:57,460 --> 00:46:55,430

vibrant you know a lot of guys here from

1042

00:46:59,410 --> 00:46:57,470

Melbourne and Sydney the Melbourne ones

1043

00:47:01,210 --> 00:46:59,420

are especially exciting people and in

1044

00:47:05,289 --> 00:47:01,220

for a certain jealous a quarter you

1045

00:47:06,640 --> 00:47:05,299

myself example and yeah awesome all over

1046

00:47:08,470 --> 00:47:06,650

the place in a look at you in your in

1047

00:47:10,029 --> 00:47:08,480

your Melbourne fashionable shirt lording

1048

00:47:13,029 --> 00:47:10,039

it over us that's right in the short

1049

00:47:16,120 --> 00:47:13,039

trousers I it's sunny 1c every year in

1050

00:47:17,769 --> 00:47:16,130

Melbourne is sunnier well talking

1051  
00:47:19,779 --> 00:47:17,779  
talking talking now a lot of that goes

1052  
00:47:21,069 --> 00:47:19,789  
on here at the National skeptics

1053  
00:47:23,380 --> 00:47:21,079  
conference it's it's just after

1054  
00:47:25,390 --> 00:47:23,390  
afternoon tea on saturday and i'm here

1055  
00:47:26,920 --> 00:47:25,400  
with the poet laureate now what are we

1056  
00:47:28,930 --> 00:47:26,930  
doing with the poet laureate with the

1057  
00:47:30,999 --> 00:47:28,940  
skeptics mean really I mean art poetry

1058  
00:47:32,049 --> 00:47:31,009  
science they're not good bedfellows in

1059  
00:47:33,160 --> 00:47:32,059  
fact it would be a threesome if they

1060  
00:47:35,680 --> 00:47:33,170  
were through them anyway that's a bad

1061  
00:47:38,200 --> 00:47:35,690  
metaphor hello hello what's your

1062  
00:47:40,210 --> 00:47:38,210  
official title in name my name is

1063  
00:47:42,819 --> 00:47:40,220

Shelley stockin and I am the poet in

1064

00:47:45,249 --> 00:47:42,829

residence at the skeptics convention you

1065

00:47:48,400 --> 00:47:45,259

live in their Clubhouse no no they let

1066

00:47:50,009 --> 00:47:48,410

me out occasionally meal times but I

1067

00:47:52,120 --> 00:47:50,019

because I have no scientific

1068

00:47:55,269 --> 00:47:52,130

qualifications and can't pronounce most

1069

00:47:57,099 --> 00:47:55,279

of the words I am I just write in rhyme

1070

00:47:57,480 --> 00:47:57,109

that's the skill I bring I've got

1071

00:47:59,190 --> 00:47:57,490

nothing

1072

00:48:00,840 --> 00:47:59,200

else look the only big word i know is

1073

00:48:04,200 --> 00:48:00,850

transubstantiation and that's not very

1074

00:48:08,150 --> 00:48:04,210

scientific no no not that I'm aware of I

1075

00:48:10,530 --> 00:48:08,160

know how to say yummy wafers and trans

1076

00:48:11,700 --> 00:48:10,540

substantive it that's good now you've

1077

00:48:13,230 --> 00:48:11,710

done a couple of poems and they've all

1078

00:48:15,390 --> 00:48:13,240

been received very well by the audience

1079

00:48:16,880 --> 00:48:15,400

there did you were these ones of a pre

1080

00:48:20,310 --> 00:48:16,890

done or did you choose some particular

1081

00:48:21,750 --> 00:48:20,320

skeptical based topics well I I was a

1082

00:48:23,370 --> 00:48:21,760

little bit of a stalker of some of the

1083

00:48:25,770 --> 00:48:23,380

speakers and asked what the topics would

1084

00:48:28,920 --> 00:48:25,780

be before the program came out so I had

1085

00:48:30,990 --> 00:48:28,930

an idea because they they might take 10

1086

00:48:33,210 --> 00:48:31,000

seconds to deliver but they take me two

1087

00:48:35,400 --> 00:48:33,220

or three weeks to write around you know

1088

00:48:37,680 --> 00:48:35,410

living and working in that sort of thing

1089

00:48:39,180 --> 00:48:37,690

that the one you just delivered then was

1090

00:48:41,030 --> 00:48:39,190

a title I don't know what was that

1091

00:48:44,010 --> 00:48:41,040

called was called the I don't know hole

1092

00:48:45,990 --> 00:48:44,020

it talks about when we don't know the

1093

00:48:49,410 --> 00:48:46,000

answer to something humans tend to fill

1094

00:48:51,120 --> 00:48:49,420

it with absolute chart and so it was and

1095

00:48:54,990 --> 00:48:51,130

that's why we have paranormal beliefs

1096

00:48:56,820 --> 00:48:55,000

and and you know think conspiracy

1097

00:48:59,340 --> 00:48:56,830

theories that they come up because we we

1098

00:49:01,380 --> 00:48:59,350

can't stand not to know the answer to

1099

00:49:03,120 --> 00:49:01,390

something so we make one up as a poet

1100

00:49:04,680 --> 00:49:03,130

you've obviously worked to a wide range

1101  
00:49:06,690 --> 00:49:04,690  
of audiences one of these skeptical

1102  
00:49:08,670 --> 00:49:06,700  
audience like to work to as a reading

1103  
00:49:11,790 --> 00:49:08,680  
poetry there they tough crowd now

1104  
00:49:15,480 --> 00:49:11,800  
they're quite good because I I've sort

1105  
00:49:17,520 --> 00:49:15,490  
of been brought up skeptical I know what

1106  
00:49:20,370 --> 00:49:17,530  
makes people nod their heads in this

1107  
00:49:22,980 --> 00:49:20,380  
crowd and hopefully giggle at the right

1108  
00:49:25,830 --> 00:49:22,990  
spots so I find this crowd quite good

1109  
00:49:27,810 --> 00:49:25,840  
when I read to other poets they're not

1110  
00:49:29,460 --> 00:49:27,820  
not as interested let's face it other

1111  
00:49:31,230 --> 00:49:29,470  
poets are just there to do their poem

1112  
00:49:33,990 --> 00:49:31,240  
and then bugger off home yes well that's

1113  
00:49:36,660 --> 00:49:34,000

partly why I'm here but no now what is

1114

00:49:38,280 --> 00:49:36,670

your favourite conspiracy that despite

1115

00:49:42,420 --> 00:49:38,290

lack of evidence you really wish was

1116

00:49:44,340 --> 00:49:42,430

true I like Kim trails but I think

1117

00:49:46,830 --> 00:49:44,350

they're hilarious I don't necessarily

1118

00:49:48,220 --> 00:49:46,840

wish they were true except then I would

1119

00:49:50,650 --> 00:49:48,230

know

1120

00:49:53,520 --> 00:49:50,660

how the hell people think that claims

1121

00:49:57,400 --> 00:49:53,530

can spray us with with nefarious things

1122

00:49:59,710 --> 00:49:57,410

but I also one that I came up that came

1123

00:50:02,680 --> 00:49:59,720

across with with currants day this

1124

00:50:04,630 --> 00:50:02,690

morning was the prepper movement so no

1125

00:50:07,470 --> 00:50:04,640

matter what the conspiracy that brings

1126  
00:50:11,349 --> 00:50:07,480  
the world to its end these people who

1127  
00:50:13,990 --> 00:50:11,359  
they stockpile guns and food and and

1128  
00:50:17,349 --> 00:50:14,000  
very strange armored vehicles to deal

1129  
00:50:19,450 --> 00:50:17,359  
with with other people when the world

1130  
00:50:21,190 --> 00:50:19,460  
comes to an end I've interviewed a

1131  
00:50:22,750 --> 00:50:21,200  
pepper on the on the planet Maynard

1132  
00:50:25,240 --> 00:50:22,760  
podcast who was actually on the show

1133  
00:50:26,680 --> 00:50:25,250  
Preppers and he explained that I said

1134  
00:50:27,790 --> 00:50:26,690  
how can you live life like that when he

1135  
00:50:30,520 --> 00:50:27,800  
said that's a very odd thing for you to

1136  
00:50:31,900 --> 00:50:30,530  
say because he said an emergency could

1137  
00:50:33,849 --> 00:50:31,910  
happen at any time it might not be a

1138  
00:50:35,500 --> 00:50:33,859

planetary one like some of us prepare

1139

00:50:37,359 --> 00:50:35,510

for but he says when he takes his kids

1140

00:50:39,040 --> 00:50:37,369

out to prepare he's basically taking

1141

00:50:40,990 --> 00:50:39,050

them camping him and learning skills

1142

00:50:42,490 --> 00:50:41,000

that they can use for other things so

1143

00:50:44,230 --> 00:50:42,500

I'd say that would be their defense to a

1144

00:50:46,150 --> 00:50:44,240

certain extent obviously if you got the

1145

00:50:47,650 --> 00:50:46,160

entire house full of things that's

1146

00:50:49,450 --> 00:50:47,660

probably impacting on your lifestyle a

1147

00:50:52,510 --> 00:50:49,460

bit but you do learn some vital skills

1148

00:50:54,930 --> 00:50:52,520

in in prepping that's true it reminds me

1149

00:50:58,330 --> 00:50:54,940

a little bit of boy scouts but with guns

1150

00:51:00,370 --> 00:50:58,340

but personally if if I thought the world

1151  
00:51:02,080 --> 00:51:00,380  
was going to come to an end the money

1152  
00:51:04,120 --> 00:51:02,090  
that Preppers spend on being prepped I

1153  
00:51:06,670 --> 00:51:04,130  
probably just put just a few really nice

1154  
00:51:08,349 --> 00:51:06,680  
substances and blow my head off okay

1155  
00:51:09,849 --> 00:51:08,359  
yeah I was going to suggest this to the

1156  
00:51:11,530 --> 00:51:09,859  
prepper but I got a feeling that you

1157  
00:51:12,760 --> 00:51:11,540  
know that's not what wouldn't go on well

1158  
00:51:14,200 --> 00:51:12,770  
with him I thought well you look I mean

1159  
00:51:15,490 --> 00:51:14,210  
that might be okay for you mate but I

1160  
00:51:19,180 --> 00:51:15,500  
can't live in a tent at the best of

1161  
00:51:21,910 --> 00:51:19,190  
times and maybe I just I just prefer to

1162  
00:51:23,710 --> 00:51:21,920  
spend my money on fun things yeah I

1163  
00:51:25,300 --> 00:51:23,720

could go with that speaking of fun

1164

00:51:27,400 --> 00:51:25,310

things here that left a lot of those

1165

00:51:29,530 --> 00:51:27,410

pre-wrapped biscuits here after the

1166

00:51:31,240 --> 00:51:29,540

afternoon tea haven't they yes maybe

1167

00:51:33,160 --> 00:51:31,250

they're preparing for dinner just not

1168

00:51:35,740 --> 00:51:33,170

feeling up tummies yeah I think I might

1169

00:51:37,060 --> 00:51:35,750

I might do some prepping myself and leg

1170

00:51:38,770 --> 00:51:37,070

off with about a dozen of these biscuits

1171

00:51:39,910 --> 00:51:38,780

and I'll be right oh hang on one of the

1172

00:51:41,620 --> 00:51:39,920

controversial questions I have been

1173

00:51:43,690 --> 00:51:41,630

asking people as it is a doctor who

1174

00:51:45,490 --> 00:51:43,700

themed dinner this evening who do you

1175

00:51:48,190 --> 00:51:45,500

think would go down in your opinion as

1176

00:51:49,610 --> 00:51:48,200

your opinion only as the unpopular

1177

00:51:51,990 --> 00:51:49,620

doctor

1178

00:51:54,540 --> 00:51:52,000

well I haven't actually watched Doctor

1179

00:51:58,410 --> 00:51:54,550

Who since the 70s I have you heard it

1180

00:52:00,810 --> 00:51:58,420

here first so I can hardly I know that

1181

00:52:04,160 --> 00:52:00,820

my favorite is even will always be Tom

1182

00:52:06,720 --> 00:52:04,170

Baker so I'm you anyone before or after

1183

00:52:08,490 --> 00:52:06,730

although david tennant for different

1184

00:52:12,210 --> 00:52:08,500

reasons oh ok just because of eye candy

1185

00:52:14,010 --> 00:52:12,220

oh ok he'd be the popular on for you for

1186

00:52:15,330 --> 00:52:14,020

me yeah he meant Tom Baker right okay

1187

00:52:17,220 --> 00:52:15,340

but the say you couldn't put you

1188

00:52:19,110 --> 00:52:17,230

couldn't put your finger on an unpopular

1189

00:52:21,090 --> 00:52:19,120

doctor so look I've been trying to get a

1190

00:52:23,400 --> 00:52:21,100

vote going for Colin Baker not because I

1191

00:52:26,460 --> 00:52:23,410

was a nice guy but I think his doctor

1192

00:52:28,620 --> 00:52:26,470

was a fairly an unusual one I'll just

1193

00:52:31,230 --> 00:52:28,630

not if it I know that doesn't work on a

1194

00:52:32,760 --> 00:52:31,240

podcast I just know she's been with

1195

00:52:33,900 --> 00:52:32,770

skeptics in this science bunch long

1196

00:52:36,150 --> 00:52:33,910

enough to know that if she doesn't know

1197

00:52:37,470 --> 00:52:36,160

what's going on just nod that's right

1198

00:52:39,540 --> 00:52:37,480

and it works with your auntie and uncle

1199

00:52:40,890 --> 00:52:39,550

too that's right i'm actually staying

1200

00:52:57,680 --> 00:52:40,900

with my auntie here in Canberra I might

1201

00:53:01,829 --> 00:53:00,180

hey this is jay novella from the

1202

00:53:03,750 --> 00:53:01,839

skeptics guide to the universe podcast

1203

00:53:05,579 --> 00:53:03,760

did you know that there are thousands of

1204

00:53:07,319 --> 00:53:05,589

skeptical reports interviews and

1205

00:53:10,020 --> 00:53:07,329

investigations going back to nineteen

1206

00:53:13,290 --> 00:53:10,030

eighty one free to download just visit w

1207

00:53:15,210 --> 00:53:13,300

WC optics com a you click the

1208

00:53:17,160 --> 00:53:15,220

publications link and enjoy almost every

1209

00:53:19,109 --> 00:53:17,170

back issue of the skeptic the journal

1210

00:53:20,670 --> 00:53:19,119

from Australian skeptics you can also

1211

00:53:22,950 --> 00:53:20,680

subscribe online and get the latest

1212

00:53:24,960 --> 00:53:22,960

digital or hard copy of this the world's

1213

00:53:28,650 --> 00:53:24,970

second oldest skeptical magazine that's

1214

00:53:37,829 --> 00:53:28,660

ww skeptics com au or just google

1215

00:53:39,990 --> 00:53:37,839

Australian skeptics in this week's a

1216

00:53:41,880 --> 00:53:40,000

week in science guest host robert

1217

00:53:44,280 --> 00:53:41,890

Llewellyn better known as Crichton from

1218

00:53:46,200 --> 00:53:44,290

Red Dwarf talks with Peter Putney from

1219

00:53:51,000 --> 00:53:46,210

the University of South Australia about

1220

00:53:53,250 --> 00:53:51,010

Trev the world beating electric car Trev

1221

00:53:54,900 --> 00:53:53,260

was built by a very talented team at the

1222

00:53:56,880 --> 00:53:54,910

University of South Australia led by

1223

00:53:58,500 --> 00:53:56,890

this extremely talented man Peter pudney

1224

00:53:59,880 --> 00:53:58,510

so Peter can you tell me what the

1225

00:54:02,010 --> 00:53:59,890

original sort of motivation was for

1226

00:54:04,319 --> 00:54:02,020

building this yeah we used to build

1227

00:54:06,750 --> 00:54:04,329

solar racing cars that race from Darwin

1228

00:54:08,190 --> 00:54:06,760

to Adelaide across Australia yeah and we

1229

00:54:09,960 --> 00:54:08,200

figured if we could drive from Darwin to

1230

00:54:11,130 --> 00:54:09,970

a blade without using petrol we should

1231

00:54:13,589 --> 00:54:11,140

be able get to work and back with in

1232

00:54:14,849 --> 00:54:13,599

using petrol right we wanted a car that

1233

00:54:17,099 --> 00:54:14,859

we could use all the time for just

1234

00:54:19,290 --> 00:54:17,109

driving around town that didn't use

1235

00:54:20,609 --> 00:54:19,300

fossil fuels right and so I mean tell

1236

00:54:22,230 --> 00:54:20,619

just go through a few of the things

1237

00:54:24,420 --> 00:54:22,240

because I've driven a few electric cars

1238

00:54:26,370 --> 00:54:24,430

I've never driven one like this it's

1239

00:54:28,920 --> 00:54:26,380

slightly different so I mean in terms of

1240

00:54:30,180 --> 00:54:28,930

batteries and range and all those things

1241

00:54:31,290 --> 00:54:30,190

I mean what what are the batteries that

1242

00:54:33,150 --> 00:54:31,300

you've used it so it's a lithium-ion

1243

00:54:35,190 --> 00:54:33,160

polymer battery about 80 kilograms and

1244

00:54:37,349 --> 00:54:35,200

it's got a range of over 200 kilometers

1245

00:54:38,910 --> 00:54:37,359

wow that's really good that's a very

1246

00:54:40,349 --> 00:54:38,920

healthy range i mean there's quite a lot

1247

00:54:41,430 --> 00:54:40,359

of commercially available electric

1248

00:54:43,589 --> 00:54:41,440

vehicles that haven't got that kind of

1249

00:54:45,359 --> 00:54:43,599

rain yeah and the secret is it's 300

1250

00:54:47,040 --> 00:54:45,369

kilograms all up for the car so it

1251

00:54:48,809 --> 00:54:47,050

doesn't take a lot of energy to push it

1252

00:54:51,390 --> 00:54:48,819

along the road and what sort of speeds

1253

00:54:53,099 --> 00:54:51,400

does it you know is it road legal it

1254

00:54:54,870 --> 00:54:53,109

clear on roads it's road legal it will

1255

00:54:56,309 --> 00:54:54,880

drive at normal ride speed sorry top

1256

00:54:58,109 --> 00:54:56,319

speed is over a hundred kilometres now

1257

00:55:00,510 --> 00:54:58,119

right so Peter I'm intrigued by the

1258

00:55:02,460 --> 00:55:00,520

design because it's I think I think it's

1259

00:55:05,520 --> 00:55:02,470

very unusual not what people are used to

1260

00:55:06,660 --> 00:55:05,530

with cars three wheels and then

1261

00:55:08,520 --> 00:55:06,670

the passages sitting behind the driver

1262

00:55:09,960 --> 00:55:08,530

and one can you explain why those

1263

00:55:11,670 --> 00:55:09,970

decisions were made there were two

1264

00:55:13,830 --> 00:55:11,680

reasons for that really first is we knew

1265

00:55:16,470 --> 00:55:13,840

that it had to be lightweight and it had

1266

00:55:17,910 --> 00:55:16,480

to be aerodynamic so having the the

1267

00:55:19,140 --> 00:55:17,920

dryer of having the passenger behind the

1268

00:55:21,810 --> 00:55:19,150

driver means that we can get good

1269

00:55:23,490 --> 00:55:21,820

aerodynamics three wheels if you've got

1270

00:55:25,050 --> 00:55:23,500

two wheels it will fall over if you've

1271

00:55:26,880 --> 00:55:25,060

got four you've got more weight and more

1272

00:55:29,040 --> 00:55:26,890

complexity than you need and does and so

1273

00:55:31,020 --> 00:55:29,050

having one person behind the other

1274

00:55:33,720 --> 00:55:31,030

basically means that the bit that's

1275

00:55:35,910 --> 00:55:33,730

pushing into the wind is reduced you can

1276  
00:55:37,530 --> 00:55:35,920  
keep that now yeah and it also it gives

1277  
00:55:39,660 --> 00:55:37,540  
the driver a really good view of the

1278  
00:55:41,790 --> 00:55:39,670  
road there's no a-pillars yeah most of

1279  
00:55:43,230 --> 00:55:41,800  
the time most people driving in in

1280  
00:55:45,360 --> 00:55:43,240  
Australia have just one person in the

1281  
00:55:46,560 --> 00:55:45,370  
car yes going to working back so we

1282  
00:55:48,090 --> 00:55:46,570  
don't often use the back seat but it's

1283  
00:55:49,650 --> 00:55:48,100  
there in case you're right and I mean

1284  
00:55:50,970 --> 00:55:49,660  
what else have you done with it so since

1285  
00:55:53,160 --> 00:55:50,980  
you built it and presumably haven't just

1286  
00:55:54,800 --> 00:55:53,170  
driven it around the campus we've done

1287  
00:55:57,030 --> 00:55:54,810  
very little driving around the campus we

1288  
00:55:58,800 --> 00:55:57,040

the students that build it actually took

1289

00:56:01,020 --> 00:55:58,810

it to Darwin and drove it from Darwin to

1290

00:56:02,880 --> 00:56:01,030

a blade demonstration class and the

1291

00:56:04,020 --> 00:56:02,890

world solar challenge once we've done

1292

00:56:05,970 --> 00:56:04,030

that I got a phone call from someone

1293

00:56:07,500 --> 00:56:05,980

saying is it any good for long trips and

1294

00:56:09,330 --> 00:56:07,510

they showed me a map of the world could

1295

00:56:10,530 --> 00:56:09,340

we drive it around the world before I

1296

00:56:13,800 --> 00:56:10,540

thought about I said yeah we can do that

1297

00:56:15,870 --> 00:56:13,810

so we did we wow we drove it from Geneva

1298

00:56:17,760 --> 00:56:15,880

headed east and basically kept driving

1299

00:56:19,170 --> 00:56:17,770

to pick up back to Jeanette wow so this

1300

00:56:21,210 --> 00:56:19,180

car has been around the world it has

1301

00:56:23,610 --> 00:56:21,220

it's about 28,000 kilometers around

1302

00:56:25,830 --> 00:56:23,620

where we hope you enjoyed this special

1303

00:56:28,380 --> 00:56:25,840

episode of a week in science with guest

1304

00:56:30,840 --> 00:56:28,390

host english actor robert Llewellyn to

1305

00:56:46,470 --> 00:56:30,850

see the film of robert driving trev go

1306

00:56:51,490 --> 00:56:49,030

thank you for listening to the skeptic

1307

00:56:53,680 --> 00:56:51,500

zone and don't forget Simon Singh

1308

00:56:56,290 --> 00:56:53,690

visiting Australia speaking here there

1309

00:56:57,609 --> 00:56:56,300

and everywhere check the Australian

1310

00:56:59,920 --> 00:56:57,619

skeptics website and the Canberra

1311

00:57:02,380 --> 00:56:59,930

skeptics websites for details of the

1312

00:57:05,680 --> 00:57:02,390

impending visit and talks by dr. Simon

1313

00:57:08,650 --> 00:57:05,690

Singh well worth well worth going to see

1314

00:57:10,630 --> 00:57:08,660

if you can make it and who knows there

1315

00:57:14,080 --> 00:57:10,640

may even be an interview of dr. Simon

1316

00:57:18,599 --> 00:57:14,090

Singh soon on the skeptic zone well

1317

00:57:21,880 --> 00:57:18,609

that's it I better zip up my suitcase

1318

00:57:24,670 --> 00:57:21,890

book that taxi and get ready to leave

1319

00:57:26,620 --> 00:57:24,680

back to Australia so for this week at

1320

00:57:28,800 --> 00:57:26,630

least this is Richard Saunders signing

1321

00:57:35,320 --> 00:57:28,810

off from the San Francisco Bay Area

1322

00:57:40,000 --> 00:57:35,330

California you've been listening to the

1323

00:57:43,840 --> 00:57:40,010

skeptic zone visit our website at [www](http://www)