

1  
00:00:06,150 --> 00:00:13,699  
welcome to the skeptic zone the podcast

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

3  
00:00:23,059 --> 00:00:30,239  
hello and welcome to the skeptic zone

4  
00:00:25,469 --> 00:00:32,488  
for the fourth of january 2014 oh my

5  
00:00:30,239 --> 00:00:36,210  
goodness me the skeptic zone has now

6  
00:00:32,488 --> 00:00:42,509  
been heard in 2008 2009 2010 2011 2012

7  
00:00:36,210 --> 00:00:45,689  
2013 2014 7 different years how

8  
00:00:42,509 --> 00:00:48,149  
ridiculous is that I hope we have a fine

9  
00:00:45,689 --> 00:00:50,579  
year ahead of skeptical activities to

10  
00:00:48,149 --> 00:00:52,589  
kick off this year an extended interview

11  
00:00:50,579 --> 00:00:54,750  
with Jeannie Scott from the National

12  
00:00:52,590 --> 00:00:57,809  
Center for Science Education in Oakland

13  
00:00:54,750 --> 00:01:00,268  
who is just on the cusp the verge of

14  
00:00:57,808 --> 00:01:02,429  
retiring this is the last interview with

15  
00:01:00,268 --> 00:01:06,298  
Jeannie before her retirement i SAT with

16  
00:01:02,429 --> 00:01:08,930  
her in her office which is basically

17  
00:01:06,299 --> 00:01:11,640  
almost packed up in lots of boxes by now

18  
00:01:08,930 --> 00:01:13,710  
so a catch up with Jeannie Scott coming

19  
00:01:11,640 --> 00:01:16,079  
up at the top of the show also on this

20  
00:01:13,709 --> 00:01:18,599  
week's show a special from the Royal

21  
00:01:16,079 --> 00:01:20,459  
Institution of Australia with robert

22  
00:01:18,599 --> 00:01:22,368  
Llewellyn being a sort of a guest

23  
00:01:20,459 --> 00:01:26,129  
interviewer talking about electric cars

24  
00:01:22,368 --> 00:01:27,890  
also I visit Google the Google

25  
00:01:26,129 --> 00:01:30,509  
headquarters have a quick chat to a

26  
00:01:27,890 --> 00:01:33,420  
skeptic zone listen to chris who works

27  
00:01:30,510 --> 00:01:36,540  
at google is very kind to her host a

28  
00:01:33,420 --> 00:01:40,170  
little too great fun and not forgetting

29

00:01:36,540 --> 00:01:42,510  
maynard spooky action maynard talks to

30  
00:01:40,170 --> 00:01:45,590  
code breaker dr. steve roberts from the

31  
00:01:42,510 --> 00:01:50,250  
Victorian skeptics and poet laureate

32  
00:01:45,590 --> 00:01:53,400  
Shelley who was a waxing lyrical at the

33  
00:01:50,250 --> 00:01:56,040  
National Convention happy birthday to

34  
00:01:53,400 --> 00:01:58,980  
Iran sir give Brian Dunning Anna Linda

35  
00:01:56,040 --> 00:02:00,600  
Brown who all hit milestones actually

36  
00:01:58,980 --> 00:02:03,659  
Brian didn't I don't think he could ever

37  
00:02:00,599 --> 00:02:05,579  
hit a milestone if he tried around it'll

38  
00:02:03,659 --> 00:02:08,099  
Linda hit a milestone and Brian and well

39  
00:02:05,579 --> 00:02:09,149  
Brian and I have when we're getting

40  
00:02:08,098 --> 00:02:10,679  
there folks we're getting there but

41  
00:02:09,149 --> 00:02:13,739  
happy birthday to all those wonderful

42  
00:02:10,679 --> 00:02:16,920  
skeptics well I better race downstairs

43  
00:02:13,739 --> 00:02:19,110

and well pack actually because I not too

44

00:02:16,919 --> 00:02:22,109

many hours I'll be heading off to the

45

00:02:19,110 --> 00:02:24,959

airport to fly back to Sydney Australia

46

00:02:22,110 --> 00:02:27,390

from the San Francisco Bay Area so while

47

00:02:24,959 --> 00:02:29,848

I am busily sorting up my socks from my

48

00:02:27,389 --> 00:02:33,888

shirts and from my bits and pieces I

49

00:02:29,848 --> 00:02:33,888

hope you enjoy this kept exam

50

00:02:50,830 --> 00:02:55,760

at the office of the National Center for

51

00:02:53,330 --> 00:02:58,549

Science Education one last time Eugenie

52

00:02:55,759 --> 00:03:01,639

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

53

00:02:58,549 --> 00:03:04,069

come back to the NCSC again and next

54

00:03:01,639 --> 00:03:06,828

time you interview and read who will be

55

00:03:04,068 --> 00:03:10,578

the new executive director of NCS am

56

00:03:06,829 --> 00:03:14,599

about well let's see the sixth of

57

00:03:10,579 --> 00:03:16,909

January not far off not far off well I

58  
00:03:14,598 --> 00:03:19,578  
mean I've been coming here to visit you

59  
00:03:16,909 --> 00:03:22,098  
in this very office now but I guess it

60  
00:03:19,579 --> 00:03:23,780  
must be ten years at least yeah yeah I

61  
00:03:22,098 --> 00:03:27,289  
would there was a photograph of you and

62  
00:03:23,780 --> 00:03:30,680  
I just over past that window out there

63  
00:03:27,289 --> 00:03:32,150  
when all the skulls was right and I was

64  
00:03:30,680 --> 00:03:34,400  
looking at it the other day and I forgot

65  
00:03:32,150 --> 00:03:36,739  
to note the year but i can tell you my

66  
00:03:34,400 --> 00:03:39,890  
hair's a lot darker in that photograph I

67  
00:03:36,739 --> 00:03:42,739  
have fewer wrinkles and yes we were both

68  
00:03:39,889 --> 00:03:45,348  
younger but but but think of how much

69  
00:03:42,739 --> 00:03:47,389  
we've learned in the intervening here as

70  
00:03:45,348 --> 00:03:49,969  
true so much wiser and more

71  
00:03:47,389 --> 00:03:51,859  
knowledgeable even if grayer and more

72  
00:03:49,969 --> 00:03:53,568  
wrinkled yeah yeah you take the bitter

73  
00:03:51,859 --> 00:03:55,760  
with the sweet on this right you have to

74  
00:03:53,568 --> 00:03:58,429  
it's we're sitting in what will soon be

75  
00:03:55,759 --> 00:04:00,590  
your former office you've been busily

76  
00:03:58,430 --> 00:04:02,629  
taking down all the wonderful things off

77  
00:04:00,590 --> 00:04:05,659  
the wall and things are in boxes and

78  
00:04:02,629 --> 00:04:08,209  
you're doing the big passing of the

79  
00:04:05,659 --> 00:04:12,650  
button on it I am I am tomorrow I will

80  
00:04:08,209 --> 00:04:15,969  
be doing the spackling of the walls now

81  
00:04:12,650 --> 00:04:18,500  
an is coming in monday next week and

82  
00:04:15,969 --> 00:04:21,439  
we'll have a week of overlap of

83  
00:04:18,500 --> 00:04:25,329  
orientation sort of giving her the big

84  
00:04:21,439 --> 00:04:28,430  
picture obviously i mean the the NCSE

85  
00:04:25,329 --> 00:04:31,009  
programs staff will really be the people

86

00:04:28,430 --> 00:04:32,329  
who won't be orienting her yeah for what

87  
00:04:31,009 --> 00:04:34,069  
we do around here and what our current

88  
00:04:32,329 --> 00:04:36,288  
projects are and what they're working on

89  
00:04:34,069 --> 00:04:39,560  
and you know where what the future will

90  
00:04:36,288 --> 00:04:41,418  
be the support staff will orient her in

91  
00:04:39,560 --> 00:04:44,930  
terms of how we do the financial stuff

92  
00:04:41,418 --> 00:04:47,159  
and now we keep track of the wonderful

93  
00:04:44,930 --> 00:04:50,370  
donations we get from people and

94  
00:04:47,160 --> 00:04:52,830  
budgetary things and so forth so and

95  
00:04:50,370 --> 00:04:56,250  
then obviously I'll be more than happy

96  
00:04:52,829 --> 00:05:03,089  
to be on call if she wants to has any

97  
00:04:56,250 --> 00:05:06,240  
additional quitting calls from not just

98  
00:05:03,089 --> 00:05:10,919  
an but staff Glenn isn't here do you

99  
00:05:06,240 --> 00:05:13,019  
know where I can find me I mean I have

100  
00:05:10,920 --> 00:05:15,930

been here for a really long time yeah

101

00:05:13,019 --> 00:05:19,129

yeah and I think Glen William but when

102

00:05:15,930 --> 00:05:22,319

you say here you don't mean physically

103

00:05:19,129 --> 00:05:25,620

see how long is in CSV being in here no

104

00:05:22,319 --> 00:05:29,219

plan Oh probably about 10 or 12 years my

105

00:05:25,620 --> 00:05:30,689

bad yeah so in this office but it's

106

00:05:29,220 --> 00:05:32,550

really good to move every once in a

107

00:05:30,689 --> 00:05:34,529

while because you do pair of things down

108

00:05:32,550 --> 00:05:37,639

but what you have to don't you yeah

109

00:05:34,529 --> 00:05:40,439

we've done pretty well are our archivist

110

00:05:37,639 --> 00:05:42,750

Charles Hargrove our archivists does a

111

00:05:40,439 --> 00:05:45,079

wonderful job and kind of keeping track

112

00:05:42,750 --> 00:05:47,220

of the things that need to be saved and

113

00:05:45,079 --> 00:05:50,459

dispensing with the items that we can

114

00:05:47,220 --> 00:05:52,650

find elsewhere but just to remind your

115  
00:05:50,459 --> 00:05:55,259  
listeners we have wonderful archives

116  
00:05:52,649 --> 00:05:58,049  
here in fact we have had Australian

117  
00:05:55,259 --> 00:06:00,060  
scholars come to work on our archives

118  
00:05:58,050 --> 00:06:01,949  
who are interested in studying it's the

119  
00:06:00,060 --> 00:06:04,680  
room around the corner is the big yes

120  
00:06:01,949 --> 00:06:09,149  
yes yeah the library and archives we've

121  
00:06:04,680 --> 00:06:12,800  
got a wonderful stuff in fact my first

122  
00:06:09,149 --> 00:06:15,659  
job my first task after retiring well

123  
00:06:12,800 --> 00:06:19,379  
let me preface that my very first job

124  
00:06:15,660 --> 00:06:21,689  
after retiring will be to spend a couple

125  
00:06:19,379 --> 00:06:24,029  
months just puttering around my house

126  
00:06:21,689 --> 00:06:29,779  
which I will enjoy doing thoroughly all

127  
00:06:24,029 --> 00:06:34,529  
the projects that kind of got delayed

128  
00:06:29,779 --> 00:06:36,599  
justification for working on but after a

129  
00:06:34,529 --> 00:06:38,339  
couple of months after an settles in and

130  
00:06:36,600 --> 00:06:40,919  
you know the new routines get developed

131  
00:06:38,339 --> 00:06:43,560  
which is always necessary in any major

132  
00:06:40,918 --> 00:06:45,779  
transition like this I plan to come back

133  
00:06:43,560 --> 00:06:47,759  
and work in the archives and the first

134  
00:06:45,779 --> 00:06:51,269  
thing I'm going to do the first thing I

135  
00:06:47,759 --> 00:06:55,019  
would like to do is to write the really

136  
00:06:51,269 --> 00:06:58,319  
definitive history of NCSE I was part of

137  
00:06:55,019 --> 00:07:00,060  
this history but with our archives I I

138  
00:06:58,319 --> 00:07:02,279  
can really do it from the scholar

139  
00:07:00,060 --> 00:07:04,649  
I don't have to just remember up what's

140  
00:07:02,279 --> 00:07:06,809  
that nineteen eighty or was that 1979 i

141  
00:07:04,649 --> 00:07:08,549  
mean i can actually document what went

142  
00:07:06,810 --> 00:07:11,129  
on and i think that's going to be a

143

00:07:08,550 --> 00:07:12,509  
really fun experience for me yeah i'm

144  
00:07:11,129 --> 00:07:14,879  
really looking forward to that so i'm

145  
00:07:12,509 --> 00:07:19,560  
going to spend to what end to what do

146  
00:07:14,879 --> 00:07:22,290  
you what will this be for a book just

147  
00:07:19,560 --> 00:07:25,829  
for the records all of the above

148  
00:07:22,290 --> 00:07:28,470  
nonsense it's something that needs to be

149  
00:07:25,829 --> 00:07:32,789  
done and i think i can do it better than

150  
00:07:28,470 --> 00:07:37,470  
then most considering i have not just my

151  
00:07:32,790 --> 00:07:39,150  
own memories and contacts but also these

152  
00:07:37,470 --> 00:07:41,490  
wonderful archives that we have here

153  
00:07:39,149 --> 00:07:44,189  
this is an important organization it's

154  
00:07:41,490 --> 00:07:48,120  
been around for 30 years plus and it's

155  
00:07:44,189 --> 00:07:50,399  
very easy for early records to get lost

156  
00:07:48,120 --> 00:07:54,449  
or to get forgotten or to get misplaced

157  
00:07:50,399 --> 00:07:55,709

or to be promised to end up in some sort

158

00:07:54,449 --> 00:07:58,259  
of an archive and then that really

159

00:07:55,709 --> 00:08:00,299  
happen we have managed to get archives

160

00:07:58,259 --> 00:08:02,339  
from a number of early board members a

161

00:08:00,300 --> 00:08:04,110  
number of people who are very active in

162

00:08:02,339 --> 00:08:06,418  
the creation and evolution controversy

163

00:08:04,110 --> 00:08:08,550  
back in the 70s and 80s and those

164

00:08:06,418 --> 00:08:11,579  
materials are wonderful i bet they are

165

00:08:08,550 --> 00:08:13,620  
but how how things have changed over the

166

00:08:11,579 --> 00:08:15,930  
years from the creation is going to view

167

00:08:13,620 --> 00:08:18,629  
huh yeah very much I mean that there's

168

00:08:15,930 --> 00:08:21,180  
been a huge evolution in creation let's

169

00:08:18,629 --> 00:08:24,329  
face it no I mean they they have gone

170

00:08:21,180 --> 00:08:25,889  
through except there's been this there's

171

00:08:24,329 --> 00:08:28,050  
been this wonderful structural

172  
00:08:25,889 --> 00:08:31,459  
continuity at the same time you know

173  
00:08:28,050 --> 00:08:33,899  
it's it's like vertebrates vertebrates

174  
00:08:31,459 --> 00:08:37,918  
appeared with it with a sort of basic

175  
00:08:33,899 --> 00:08:42,899  
you know vertebrate four-on-the-floor

176  
00:08:37,918 --> 00:08:45,980  
kind of body plan yeah back in the late

177  
00:08:42,899 --> 00:08:48,509  
cretaceous early seneca cenozoic and

178  
00:08:45,980 --> 00:08:50,970  
there have been all these variations on

179  
00:08:48,509 --> 00:08:54,088  
that theme well you know ultimately the

180  
00:08:50,970 --> 00:08:57,360  
body plan of creationism is special

181  
00:08:54,089 --> 00:08:59,940  
creation that God specially created he

182  
00:08:57,360 --> 00:09:02,430  
poofed things into existence now with

183  
00:08:59,940 --> 00:09:04,980  
the with the young earth creationist

184  
00:09:02,429 --> 00:09:07,799  
like your beloved Ken Ham exported to us

185  
00:09:04,980 --> 00:09:09,000  
that's right I've forgiven you thank you

186  
00:09:07,799 --> 00:09:11,079  
very much well we've had a lot of

187  
00:09:09,000 --> 00:09:13,299  
American imports early as I

188  
00:09:11,080 --> 00:09:17,410  
promise you that I mean where was the

189  
00:09:13,299 --> 00:09:21,339  
mind poisoned I mean but young earth

190  
00:09:17,409 --> 00:09:23,500  
creationist like Ken Ham take a very

191  
00:09:21,340 --> 00:09:26,320  
strict special creation point of view

192  
00:09:23,500 --> 00:09:29,289  
that God really proved everything into

193  
00:09:26,320 --> 00:09:32,200  
existence and basically one step so it's

194  
00:09:29,289 --> 00:09:34,419  
just over six days but the really short

195  
00:09:32,200 --> 00:09:37,060  
days so there was an awful lot of

196  
00:09:34,419 --> 00:09:38,649  
special creation of planets and galaxies

197  
00:09:37,059 --> 00:09:41,139  
and the whole shooting match and plans

198  
00:09:38,649 --> 00:09:43,029  
announced and the intelligent design

199  
00:09:41,139 --> 00:09:45,639  
people have kind of shifted their focus

200

00:09:43,029 --> 00:09:47,679  
a bit most of them aren't special

201  
00:09:45,639 --> 00:09:50,319  
creationists and quite the same fashion

202  
00:09:47,679 --> 00:09:52,929  
but they are special creations to agree

203  
00:09:50,320 --> 00:09:56,020  
but they generally are focusing on god

204  
00:09:52,929 --> 00:09:58,509  
having to specially create the micro

205  
00:09:56,019 --> 00:10:01,870  
universe so to speak God doesn't have to

206  
00:09:58,509 --> 00:10:03,460  
specially create a whole galaxy but God

207  
00:10:01,870 --> 00:10:05,830  
does have two specially create the

208  
00:10:03,460 --> 00:10:07,720  
bacterial flagellum so it sort of seems

209  
00:10:05,830 --> 00:10:10,000  
like a concentration problem to me I

210  
00:10:07,720 --> 00:10:12,700  
mean but it's also it's interesting

211  
00:10:10,000 --> 00:10:15,279  
these people I guess people have been

212  
00:10:12,700 --> 00:10:19,120  
doing this for the millennia seems to

213  
00:10:15,279 --> 00:10:21,639  
know the mind of God so well yeah it's a

214  
00:10:19,120 --> 00:10:28,529

it's not a very it's not a very modest

215

00:10:21,639 --> 00:10:31,419  
proposal isn't it sits in fact non

216

00:10:28,529 --> 00:10:33,449  
biblical literalist Christians really

217

00:10:31,419 --> 00:10:35,949  
considered that the ultimate of hubris

218

00:10:33,450 --> 00:10:37,900  
they they they believed in a much more

219

00:10:35,950 --> 00:10:40,200  
powerful God and in my conversations

220

00:10:37,899 --> 00:10:44,769  
with them not one that has to be there

221

00:10:40,200 --> 00:10:48,520  
candid with his biomolecular screwdriver

222

00:10:44,769 --> 00:10:52,720  
fine-tuning a propeller yeah on a

223

00:10:48,519 --> 00:10:56,350  
flagellum somehow this seems a little

224

00:10:52,720 --> 00:10:58,870  
excessive but actually we had a we had a

225

00:10:56,350 --> 00:11:01,360  
cover or the cover of the next issue of

226

00:10:58,870 --> 00:11:04,179  
reports of NC SC that's coming out has

227

00:11:01,360 --> 00:11:06,070  
as a cartoon of exactly that very point

228

00:11:04,179 --> 00:11:09,159  
yeah you will you will receive it

229  
00:11:06,070 --> 00:11:11,770  
shortly I assume but it's a you know

230  
00:11:09,159 --> 00:11:14,259  
it's God standing there you may be

231  
00:11:11,769 --> 00:11:16,539  
standing on a cloud I'm not too sure but

232  
00:11:14,259 --> 00:11:20,710  
he's saying something like oh yes I

233  
00:11:16,539 --> 00:11:24,009  
created you know a hundred billion

234  
00:11:20,710 --> 00:11:24,320  
galaxies by natural causes but I had

235  
00:11:24,009 --> 00:11:26,629  
just

236  
00:11:24,320 --> 00:11:29,720  
actually create the bacteria that's good

237  
00:11:26,629 --> 00:11:32,570  
that's what can I say what are you going

238  
00:11:29,720 --> 00:11:34,340  
to miss I mean you can play colleague to

239  
00:11:32,570 --> 00:11:38,210  
colleague w guy aren't doing your chores

240  
00:11:34,340 --> 00:11:40,190  
at home but yeah I'm little known fact I

241  
00:11:38,210 --> 00:11:44,269  
really am a homebody I really like I

242  
00:11:40,190 --> 00:11:47,480  
really like you know cooking meals for

243

00:11:44,269 --> 00:11:51,710

people I like I could vouch for that I

244

00:11:47,480 --> 00:11:53,860

like gardening I like just making things

245

00:11:51,710 --> 00:11:56,900

work around the house and yeah I mean

246

00:11:53,860 --> 00:11:59,090

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

247

00:11:56,899 --> 00:12:00,470

he's disabled he's not really capable of

248

00:11:59,090 --> 00:12:03,200

doing a lot of the things that he

249

00:12:00,470 --> 00:12:06,080

previously did so those have fallen to

250

00:12:03,200 --> 00:12:07,790

me yeah and I've actually overcome a

251

00:12:06,080 --> 00:12:11,090

great deal of my fear of things like

252

00:12:07,789 --> 00:12:12,740

screwdrivers and electric drills and

253

00:12:11,090 --> 00:12:15,980

things like that and I'm coping

254

00:12:12,740 --> 00:12:18,259

remarkably well yeah but I'm a whole lot

255

00:12:15,980 --> 00:12:21,889

better with with kitchen tools than with

256

00:12:18,259 --> 00:12:24,080

carpentry tools just me but no I'll miss

257

00:12:21,889 --> 00:12:26,659  
I'm just not seeing these people every

258  
00:12:24,080 --> 00:12:29,210  
day right because that's been a real

259  
00:12:26,659 --> 00:12:31,789  
treat I mean you know I get up in the

260  
00:12:29,210 --> 00:12:34,009  
morning and I look forward to coming to

261  
00:12:31,789 --> 00:12:35,779  
work mostly not just because the work is

262  
00:12:34,009 --> 00:12:38,090  
interesting but because the people I

263  
00:12:35,779 --> 00:12:42,379  
work with are just so super one of the

264  
00:12:38,090 --> 00:12:45,019  
things I think that you may miss or may

265  
00:12:42,379 --> 00:12:47,720  
not is in your position you've certainly

266  
00:12:45,019 --> 00:12:49,370  
done a lot of traffic my goodness me

267  
00:12:47,720 --> 00:12:52,960  
you've been around the world and around

268  
00:12:49,370 --> 00:12:56,690  
this country many times do you is that

269  
00:12:52,960 --> 00:12:59,960  
for you still a treat or is that sure

270  
00:12:56,690 --> 00:13:03,740  
you know the best thing about traveling

271  
00:12:59,960 --> 00:13:06,680

is being there I mean it's the people

272

00:13:03,740 --> 00:13:09,440

that I meet the people that I see I have

273

00:13:06,679 --> 00:13:12,709

always been treated just wonderfully by

274

00:13:09,440 --> 00:13:15,080

my hosts they always make it you know

275

00:13:12,710 --> 00:13:17,120

much more of us than me but but you know

276

00:13:15,080 --> 00:13:18,710

I've always been greeted very warmly and

277

00:13:17,120 --> 00:13:21,019

my ideas have been appreciated and

278

00:13:18,710 --> 00:13:23,840

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

279

00:13:21,019 --> 00:13:27,559

going to continue traveling i'm still

280

00:13:23,840 --> 00:13:30,530

going to continue speaking the

281

00:13:27,559 --> 00:13:33,549

difference is that I I will be trying to

282

00:13:30,529 --> 00:13:36,100

pass well I have been trying for the

283

00:13:33,549 --> 00:13:38,740

several years really to try to pass more

284

00:13:36,100 --> 00:13:40,720

invitations on to my staff because they

285

00:13:38,740 --> 00:13:43,769

are very good they should be recognized

286  
00:13:40,720 --> 00:13:46,209  
for their abilities and also because I

287  
00:13:43,769 --> 00:13:48,870  
you know I mean I still have some shelf

288  
00:13:46,208 --> 00:13:52,239  
life available to me for a while but

289  
00:13:48,870 --> 00:13:54,100  
yeah there will come a time when they're

290  
00:13:52,240 --> 00:13:56,409  
going to be much better versed in what's

291  
00:13:54,100 --> 00:13:58,269  
going on then I cuz they're here it must

292  
00:13:56,409 --> 00:14:00,578  
happen that's I guess it might happen

293  
00:13:58,269 --> 00:14:02,950  
I'm okay with it yeah you know yeah I

294  
00:14:00,578 --> 00:14:04,569  
can see a point because unless you're

295  
00:14:02,950 --> 00:14:06,399  
here on the front line as it was there

296  
00:14:04,570 --> 00:14:08,860  
gonna be news items and things that you

297  
00:14:06,399 --> 00:14:10,419  
you just can't keep up and you know that

298  
00:14:08,860 --> 00:14:13,060  
the flare-ups that we deal with a lot of

299  
00:14:10,419 --> 00:14:16,599  
those never do see the light of day I

300  
00:14:13,059 --> 00:14:19,989  
mean obviously I'll you know I I put too

301  
00:14:16,600 --> 00:14:21,879  
much into this organization to just

302  
00:14:19,990 --> 00:14:24,430  
abandon it I'm obviously going to help

303  
00:14:21,879 --> 00:14:28,088  
out however I can to you know keep the

304  
00:14:24,429 --> 00:14:29,859  
organization strong and doing well but a

305  
00:14:28,089 --> 00:14:31,329  
lot of the you know a lot of the travel

306  
00:14:29,860 --> 00:14:33,610  
a lot of the speaking that I've been

307  
00:14:31,328 --> 00:14:36,519  
doing on behalf of in CSC is going to

308  
00:14:33,610 --> 00:14:39,430  
diminish yeah but i still have my

309  
00:14:36,519 --> 00:14:42,310  
interest in the skeptics you know i

310  
00:14:39,429 --> 00:14:46,899  
still have I'm still in a couple of

311  
00:14:42,309 --> 00:14:49,149  
boards that require me to travel I've

312  
00:14:46,899 --> 00:14:51,909  
been fairly careful and not accepting

313  
00:14:49,149 --> 00:14:55,839  
some invitations to serve on boards and

314

00:14:51,909 --> 00:14:57,939  
things because I I really do want I want

315  
00:14:55,839 --> 00:14:59,649  
to kind of stand back for six months or

316  
00:14:57,940 --> 00:15:03,220  
so and say okay you know what do I want

317  
00:14:59,649 --> 00:15:08,559  
to do when I grow up yeah where do I go

318  
00:15:03,220 --> 00:15:11,740  
from here and I I think I i will

319  
00:15:08,559 --> 00:15:15,099  
probably spend more time with with the

320  
00:15:11,740 --> 00:15:19,389  
skeptics movements because it in one

321  
00:15:15,100 --> 00:15:21,190  
sense it's kind of the root of most of

322  
00:15:19,389 --> 00:15:22,720  
what I've been doing I guess says I

323  
00:15:21,190 --> 00:15:25,000  
guess it's a straight up like

324  
00:15:22,720 --> 00:15:27,639  
understanding changes yeah yeah because

325  
00:15:25,000 --> 00:15:29,620  
it's everything and sometimes it can

326  
00:15:27,639 --> 00:15:30,819  
feel a little overwhelming we have an

327  
00:15:29,620 --> 00:15:32,139  
interesting list on the Australian

328  
00:15:30,820 --> 00:15:37,528

skeptics website of things we're

329

00:15:32,139 --> 00:15:40,088

skeptical of Etsy its extensive and uh

330

00:15:37,528 --> 00:15:41,860

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

331

00:15:40,089 --> 00:15:44,829

specialize in

332

00:15:41,860 --> 00:15:47,889

and I specialized in one area yes yeah

333

00:15:44,828 --> 00:15:50,859

and I'm pretty good at it other people

334

00:15:47,889 --> 00:15:52,328

also are very good at this this area but

335

00:15:50,860 --> 00:15:54,159

it's not that I'm going to suddenly

336

00:15:52,328 --> 00:15:56,469

become a Bigfoot specialist or something

337

00:15:54,159 --> 00:15:59,259

like that what I really want to do

338

00:15:56,470 --> 00:16:00,910

whatever yeah I big foots cray I'm a

339

00:15:59,259 --> 00:16:02,289

physical anthropologist of course I'm

340

00:16:00,909 --> 00:16:06,939

going to be of course I'm gonna love

341

00:16:02,289 --> 00:16:09,610

Bigfoot can't can't turn Lewis um but

342

00:16:06,940 --> 00:16:12,370

but it's really the public understanding

343  
00:16:09,610 --> 00:16:14,700  
of science it's really helping people

344  
00:16:12,370 --> 00:16:18,039  
understand science as a way of knowing

345  
00:16:14,700 --> 00:16:21,370  
why it is such a unique and valuable way

346  
00:16:18,039 --> 00:16:24,819  
of knowing and quite frankly why it is

347  
00:16:21,370 --> 00:16:29,709  
not a philosophy of life yeah i'm also a

348  
00:16:24,820 --> 00:16:31,839  
humanist and I'm a after a while I may

349  
00:16:29,708 --> 00:16:35,319  
be speaking more about some of my

350  
00:16:31,839 --> 00:16:37,720  
personal views I have avoided that as a

351  
00:16:35,320 --> 00:16:40,690  
as the director of NCIC because it's

352  
00:16:37,720 --> 00:16:42,970  
confusing to people there's been enough

353  
00:16:40,690 --> 00:16:45,730  
confusion already with the fact that we

354  
00:16:42,970 --> 00:16:49,509  
deal with evolution and the assumption

355  
00:16:45,730 --> 00:16:52,750  
on some by some parties that therefore

356  
00:16:49,509 --> 00:16:55,539  
we must therefore be a bunch of atheists

357  
00:16:52,750 --> 00:16:57,970  
and you know and so I've had to work

358  
00:16:55,539 --> 00:17:01,120  
very hard at combating that and it's a

359  
00:16:57,970 --> 00:17:02,889  
constant struggle that will continue and

360  
00:17:01,120 --> 00:17:04,660  
of course it's it's nonsense because we

361  
00:17:02,889 --> 00:17:06,910  
are not officially any kind of

362  
00:17:04,660 --> 00:17:11,048  
ideologically based organization except

363  
00:17:06,910 --> 00:17:13,029  
one that you know has the ideology that

364  
00:17:11,048 --> 00:17:13,929  
people should know science but I don't

365  
00:17:13,029 --> 00:17:15,849  
think that's going to be too

366  
00:17:13,929 --> 00:17:19,179  
objectionable by anyone well I hope not

367  
00:17:15,849 --> 00:17:20,948  
I mean our members are people who are

368  
00:17:19,179 --> 00:17:24,699  
believers and or not believers and

369  
00:17:20,949 --> 00:17:26,318  
people who don't care our staff consists

370  
00:17:24,699 --> 00:17:27,669  
of people who are believers people who

371

00:17:26,318 --> 00:17:31,450  
are not believers and people who don't

372  
00:17:27,669 --> 00:17:34,000  
care and as far as what we do here we

373  
00:17:31,450 --> 00:17:37,029  
promote good science and good science

374  
00:17:34,000 --> 00:17:40,390  
education evolution and also the climate

375  
00:17:37,029 --> 00:17:44,349  
change issue yeah yeah and you know

376  
00:17:40,390 --> 00:17:48,419  
whatever personal opinions we have as

377  
00:17:44,349 --> 00:17:51,319  
individuals at ncsu staff or members

378  
00:17:48,419 --> 00:17:55,970  
they you know we are all united

379  
00:17:51,319 --> 00:17:57,678  
in in that bigger picture of how do we

380  
00:17:55,970 --> 00:17:59,630  
get the public to understand science

381  
00:17:57,679 --> 00:18:03,350  
understand evolution understand climate

382  
00:17:59,630 --> 00:18:05,899  
change and not object to good science

383  
00:18:03,349 --> 00:18:07,668  
being taught to their kids and that's

384  
00:18:05,898 --> 00:18:10,278  
really what you do around here yeah

385  
00:18:07,669 --> 00:18:12,679

because over the years it's been an

386

00:18:10,278 --> 00:18:16,278

interesting it is such an interesting

387

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

story and I'm sure in many years to come

388

00:18:16,278 --> 00:18:21,769

it'll be one of the classic studies of

389

00:18:18,679 --> 00:18:24,259

science this whole creation is all yeah

390

00:18:21,769 --> 00:18:29,778

I think in this country especially I

391

00:18:24,259 --> 00:18:32,179

think specially and its export now that

392

00:18:29,778 --> 00:18:33,788

I see some sort of pole in the media

393

00:18:32,179 --> 00:18:36,350

just the other day about the number of

394

00:18:33,788 --> 00:18:38,329

now I remember if it's number Americans

395

00:18:36,349 --> 00:18:41,388

or the number of Republicans who do both

396

00:18:38,329 --> 00:18:43,759

that was a new pupil yeah we posted it

397

00:18:41,388 --> 00:18:49,459

on our website that's why might a ported

398

00:18:43,759 --> 00:18:53,659

there and it it pretty much tracks the

399

00:18:49,460 --> 00:18:57,590

last pew and everybody else's poll of I

400  
00:18:53,659 --> 00:19:01,549  
think four or five years ago Americans

401  
00:18:57,589 --> 00:19:04,269  
have a high percentage of citizens who

402  
00:19:01,548 --> 00:19:07,128  
don't accept evolution certainly and

403  
00:19:04,269 --> 00:19:10,579  
Republicans reject evolution at higher

404  
00:19:07,128 --> 00:19:13,369  
levels than do Democrats it mainstream

405  
00:19:10,579 --> 00:19:15,888  
Christians accept evolution at a much

406  
00:19:13,369 --> 00:19:17,689  
higher level than do conservative

407  
00:19:15,888 --> 00:19:21,428  
Christians I mean there's all sorts of

408  
00:19:17,690 --> 00:19:24,798  
these subdivisions but overall the

409  
00:19:21,429 --> 00:19:28,759  
percentages of Americans who reject

410  
00:19:24,798 --> 00:19:32,388  
evolution is surprisingly high still

411  
00:19:28,759 --> 00:19:33,889  
yeah well as it very much over the user

412  
00:19:32,388 --> 00:19:35,689  
does it mean more or less consistent

413  
00:19:33,888 --> 00:19:37,579  
it's been pretty consistent it's been

414  
00:19:35,690 --> 00:19:39,970  
pretty much goes up a little bit goes

415  
00:19:37,579 --> 00:19:43,369  
down a little bit kind of within the the

416  
00:19:39,970 --> 00:19:45,379  
it's amazing staying power hasn't it

417  
00:19:43,369 --> 00:19:47,418  
when you think about it as we progress

418  
00:19:45,378 --> 00:19:50,058  
through the years and science marches on

419  
00:19:47,419 --> 00:19:52,370  
and it's all the things that are

420  
00:19:50,058 --> 00:19:57,548  
discovered about evolution yeah yeah and

421  
00:19:52,369 --> 00:19:59,959  
yet is it isn't that a lot of people

422  
00:19:57,548 --> 00:20:01,849  
after all your experience you must have

423  
00:19:59,960 --> 00:20:02,759  
an inkling isn't distasteful for a lot

424  
00:20:01,849 --> 00:20:07,029  
of people

425  
00:20:02,759 --> 00:20:09,220  
part of the problem is the structure of

426  
00:20:07,029 --> 00:20:13,660  
religion in the u.s. a much higher

427  
00:20:09,220 --> 00:20:18,220  
degree of adherence to religion than in

428

00:20:13,660 --> 00:20:20,380  
Europe say Australia is close but you

429  
00:20:18,220 --> 00:20:23,110  
have fewer lower percentage of people

430  
00:20:20,380 --> 00:20:24,580  
who identify themselves as religious but

431  
00:20:23,109 --> 00:20:26,649  
it's the structure more than anything

432  
00:20:24,579 --> 00:20:29,168  
else not just the number not just the

433  
00:20:26,650 --> 00:20:31,390  
percentage America has a much more

434  
00:20:29,169 --> 00:20:33,250  
conservative kind of Christianity in

435  
00:20:31,390 --> 00:20:35,259  
general and in a much higher proportion

436  
00:20:33,250 --> 00:20:36,970  
of American Christians are conservative

437  
00:20:35,259 --> 00:20:39,359  
Christians than you find elsewhere hmm

438  
00:20:36,970 --> 00:20:42,789  
after all it was in this country that

439  
00:20:39,359 --> 00:20:45,069  
new with its entrepreneurial spirit goes

440  
00:20:42,789 --> 00:20:47,589  
to religions as well there's an awful

441  
00:20:45,069 --> 00:20:49,418  
lot of conservative religions religious

442  
00:20:47,589 --> 00:20:51,869

denominations that were founded here

443

00:20:49,419 --> 00:20:56,650

including the you know the general

444

00:20:51,869 --> 00:21:01,479

fundamentalist strain of Christianity

445

00:20:56,650 --> 00:21:03,540

but also charismatic so various kinds

446

00:21:01,480 --> 00:21:08,650

Pentecostal this of various kinds

447

00:21:03,539 --> 00:21:11,649

Jehovah's Witnesses notice the list goes

448

00:21:08,650 --> 00:21:15,900

on not and those tend to be more more

449

00:21:11,650 --> 00:21:18,490

biblically based and that is the problem

450

00:21:15,900 --> 00:21:21,040

we have a more conservative form of

451

00:21:18,490 --> 00:21:24,849

America of Christianity in the United

452

00:21:21,039 --> 00:21:28,839

States but we also don't do that great a

453

00:21:24,849 --> 00:21:31,869

job in teaching evolution and so you

454

00:21:28,839 --> 00:21:35,109

know if evolution is is just given kind

455

00:21:31,869 --> 00:21:39,849

of a little once over or not spoken of

456

00:21:35,109 --> 00:21:44,619

it all and and the did the strength of

457  
00:21:39,849 --> 00:21:46,359  
evolution as the foundation for biology

458  
00:21:44,619 --> 00:21:51,369  
and geology if that's not clearly

459  
00:21:46,359 --> 00:21:53,109  
confirmed akita to students and the high

460  
00:21:51,369 --> 00:21:57,009  
proportion of them come into the class

461  
00:21:53,109 --> 00:22:00,009  
already with the idea that there's

462  
00:21:57,009 --> 00:22:02,679  
something you know if I accept evolution

463  
00:22:00,009 --> 00:22:05,950  
I'm going to lose really big yes it's

464  
00:22:02,679 --> 00:22:08,950  
yet a surprise they will find that you

465  
00:22:05,950 --> 00:22:10,659  
find not very many people accepting

466  
00:22:08,950 --> 00:22:12,700  
evolution interesting is that that that

467  
00:22:10,659 --> 00:22:17,560  
almost it's a black male

468  
00:22:12,700 --> 00:22:20,289  
way well it's it's it's not just

469  
00:22:17,559 --> 00:22:22,299  
blackmail I mean it's it's the

470  
00:22:20,289 --> 00:22:25,690  
expectation that you would have whatever

471  
00:22:22,299 --> 00:22:27,940  
your ideology I mean you know religion

472  
00:22:25,690 --> 00:22:32,620  
as a type of ideology politics is a type

473  
00:22:27,940 --> 00:22:35,320  
of ideology economics can be ideological

474  
00:22:32,619 --> 00:22:38,679  
as well one thing we found with the

475  
00:22:35,319 --> 00:22:45,099  
climate change situation is that people

476  
00:22:38,680 --> 00:22:48,789  
who believe that if global warming is

477  
00:22:45,099 --> 00:22:50,439  
actually taking place that means that

478  
00:22:48,789 --> 00:22:51,940  
the government is going to be given more

479  
00:22:50,440 --> 00:22:54,460  
power there's going to be more

480  
00:22:51,940 --> 00:22:56,019  
centralization of government it's going

481  
00:22:54,460 --> 00:22:59,529  
to impinge upon American individualism

482  
00:22:56,019 --> 00:23:02,259  
and yeah there they have an ideological

483  
00:22:59,529 --> 00:23:04,389  
reason to a to reject languages well

484  
00:23:02,259 --> 00:23:06,039  
there's a huge I've just been looking at

485

00:23:04,390 --> 00:23:09,550  
the papers recently from Australia and

486  
00:23:06,039 --> 00:23:12,190  
there's this huge debate my guess is a

487  
00:23:09,549 --> 00:23:13,899  
huge debate about some economic advisor

488  
00:23:12,190 --> 00:23:15,610  
coming in the papers and saying how

489  
00:23:13,900 --> 00:23:19,000  
climate change and then we've been old

490  
00:23:15,609 --> 00:23:21,129  
off elder ransom about it and it's you

491  
00:23:19,000 --> 00:23:23,680  
know social ruin an economic route and

492  
00:23:21,130 --> 00:23:25,620  
you've heard about this this trip to the

493  
00:23:23,680 --> 00:23:28,360  
Antarctic that was young in the ice and

494  
00:23:25,619 --> 00:23:30,279  
I was listening to some radio from back

495  
00:23:28,359 --> 00:23:31,929  
home and the announcers crowing saying

496  
00:23:30,279 --> 00:23:33,369  
are these foolish scientists went down

497  
00:23:31,930 --> 00:23:35,620  
there to check on climate change they've

498  
00:23:33,369 --> 00:23:37,689  
got frozen in the ice you know the eyes

499  
00:23:35,619 --> 00:23:41,589

therefore therefore the Ice Age is

500

00:23:37,690 --> 00:23:45,580

coming more fool them you know people

501

00:23:41,589 --> 00:23:48,179

really don't get it you're about about

502

00:23:45,579 --> 00:23:51,309

the southern hemisphere so we see

503

00:23:48,180 --> 00:23:53,259

there's two kinds of ice in the South

504

00:23:51,309 --> 00:23:55,210

Pole there's the land ice and there's

505

00:23:53,259 --> 00:23:59,859

the sea ice they don't behave the same

506

00:23:55,210 --> 00:24:01,720

the land ice is melting like crazy the

507

00:23:59,859 --> 00:24:04,539

sea ice is actually increasing slightly

508

00:24:01,720 --> 00:24:06,610

and if you only focus on the sea ice and

509

00:24:04,539 --> 00:24:08,079

that on the reason why the sea ice is

510

00:24:06,609 --> 00:24:10,809

increasing you're going to miss the

511

00:24:08,079 --> 00:24:12,339

point and of course the anti global

512

00:24:10,809 --> 00:24:15,099

warming people aren't for doing

513

00:24:12,339 --> 00:24:17,259

precisely that but what's happening with

514  
00:24:15,099 --> 00:24:20,949  
the sea ice and the reason why it's

515  
00:24:17,259 --> 00:24:23,109  
building up is actually partly a result

516  
00:24:20,950 --> 00:24:24,850  
of the melting of the land lies ice

517  
00:24:23,109 --> 00:24:26,199  
because the land ice is of course

518  
00:24:24,849 --> 00:24:28,000  
freshwater

519  
00:24:26,200 --> 00:24:29,590  
freshwater and saltwater have different

520  
00:24:28,000 --> 00:24:32,259  
densities they mix differently they have

521  
00:24:29,589 --> 00:24:36,069  
different temperatures and you're

522  
00:24:32,259 --> 00:24:40,869  
getting a that plus the the currents and

523  
00:24:36,069 --> 00:24:44,079  
the winds in the polar region influence

524  
00:24:40,869 --> 00:24:46,569  
the building up the stacking ice the

525  
00:24:44,079 --> 00:24:51,849  
stacking up of the sea ice and then that

526  
00:24:46,569 --> 00:24:53,919  
of course exposes more surface of the

527  
00:24:51,849 --> 00:24:56,230  
water which then freezes and then gets

528  
00:24:53,920 --> 00:24:58,779  
blown up and so it looks like the sea

529  
00:24:56,230 --> 00:25:02,710  
ice is actually building up but actually

530  
00:24:58,779 --> 00:25:05,889  
the whole area is is severely melting in

531  
00:25:02,710 --> 00:25:09,220  
the land ice that the big Antarctic ice

532  
00:25:05,890 --> 00:25:12,130  
sheets are melting very very quickly not

533  
00:25:09,220 --> 00:25:14,440  
quite as fast is the polar ice cap the

534  
00:25:12,130 --> 00:25:17,800  
North Pole which is even more stunning

535  
00:25:14,440 --> 00:25:19,840  
in its in its changes no it's it's I've

536  
00:25:17,799 --> 00:25:22,299  
read some of the same new denialist oh

537  
00:25:19,839 --> 00:25:25,019  
yes giggling oh it's so easy they got

538  
00:25:22,299 --> 00:25:28,119  
caught it's so easy for them to do and

539  
00:25:25,019 --> 00:25:30,970  
it's irrelevant and that it is like that

540  
00:25:28,119 --> 00:25:33,339  
made this huge point and the silly

541  
00:25:30,970 --> 00:25:37,329  
scientists look with we want their so

542

00:25:33,339 --> 00:25:40,509  
embarrassed down there it's it's I guess

543  
00:25:37,329 --> 00:25:43,960  
it's it's reflected having the two areas

544  
00:25:40,509 --> 00:25:45,609  
that the NCSE are involved with crazy

545  
00:25:43,960 --> 00:25:48,789  
mirrors of each other and we're not

546  
00:25:45,609 --> 00:25:51,069  
exactly yeah yeah but you know that the

547  
00:25:48,789 --> 00:25:53,109  
you're you're talking about the article

548  
00:25:51,069 --> 00:25:58,240  
or the news report that you heard about

549  
00:25:53,109 --> 00:26:01,990  
the climate change critic crowing about

550  
00:25:58,240 --> 00:26:04,569  
the the scientists tiny ice spin is

551  
00:26:01,990 --> 00:26:08,079  
everything you know you can take the

552  
00:26:04,569 --> 00:26:10,539  
same event the same evidence and you

553  
00:26:08,079 --> 00:26:13,529  
spin it according to whatever your

554  
00:26:10,539 --> 00:26:19,569  
ideological presupposition is there and

555  
00:26:13,529 --> 00:26:22,000  
you can make political hay this is the

556  
00:26:19,569 --> 00:26:24,639

actual science that undergirds all of

557

00:26:22,000 --> 00:26:28,390

these claims is actually very clear and

558

00:26:24,640 --> 00:26:32,950

it's very alarming actually and it's

559

00:26:28,390 --> 00:26:36,520

it's not questionable I was um were

560

00:26:32,950 --> 00:26:38,309

we're taping this in january 2014 and in

561

00:26:36,519 --> 00:26:40,619

February of 2014

562

00:26:38,309 --> 00:26:43,500

bill nye the science guy was a very

563

00:26:40,619 --> 00:26:45,479

popular entertainer here and science

564

00:26:43,500 --> 00:26:47,910

communicator used to have a kids show

565

00:26:45,480 --> 00:26:51,660

for many years you probably can get it

566

00:26:47,910 --> 00:26:53,640

on various kinds of international

567

00:26:51,660 --> 00:26:55,500

sources bill not science guy you're

568

00:26:53,640 --> 00:26:57,870

probably familiar with it as well I make

569

00:26:55,500 --> 00:27:00,180

bill a couple years back and it is

570

00:26:57,869 --> 00:27:02,339

heaven knows where he's very keen out

571  
00:27:00,180 --> 00:27:04,259  
with skeptics activities so he's been to

572  
00:27:02,339 --> 00:27:06,119  
a number of skeptics programs I told him

573  
00:27:04,259 --> 00:27:07,859  
the PAL balanced riggs excellent oh very

574  
00:27:06,119 --> 00:27:10,679  
good yep it does it he should credit

575  
00:27:07,859 --> 00:27:13,529  
Mason dancing and this is something I

576  
00:27:10,680 --> 00:27:17,759  
learned from the Australians okay but

577  
00:27:13,529 --> 00:27:20,490  
bill is scheduled to debate our beloved

578  
00:27:17,759 --> 00:27:23,549  
ken ham Karen han and that's going to

579  
00:27:20,490 --> 00:27:28,259  
take place in February as scheduled and

580  
00:27:23,549 --> 00:27:33,869  
I was looking at a video tape that was

581  
00:27:28,259 --> 00:27:36,029  
online of Bill Nye debating one of the

582  
00:27:33,869 --> 00:27:39,419  
climate change denier people earlier and

583  
00:27:36,029 --> 00:27:41,519  
boy talk about the Gish Gallup the

584  
00:27:39,420 --> 00:27:43,200  
climate the climate game anyway he was

585  
00:27:41,519 --> 00:27:45,329  
doing a gift Gallup which of course is a

586  
00:27:43,200 --> 00:27:47,930  
phrase that we use to describe how

587  
00:27:45,329 --> 00:27:50,519  
creationists debate by throwing out

588  
00:27:47,930 --> 00:27:53,039  
factoids after factoids after factoid

589  
00:27:50,519 --> 00:27:55,259  
most of which have some sort of grain of

590  
00:27:53,039 --> 00:28:00,149  
truth but piled higher and higher and

591  
00:27:55,259 --> 00:28:03,059  
higher produce the spin that evolution

592  
00:28:00,150 --> 00:28:05,160  
is terrible science even though each of

593  
00:28:03,059 --> 00:28:06,690  
these claims can be refuted and have

594  
00:28:05,160 --> 00:28:10,019  
been reviewed and I have been long

595  
00:28:06,690 --> 00:28:12,180  
refuted and their distortions of the

596  
00:28:10,019 --> 00:28:14,849  
science in most cases anyway well that

597  
00:28:12,180 --> 00:28:17,279  
was the same that this climate science

598  
00:28:14,849 --> 00:28:22,699  
denial was doing he was tossing out this

599

00:28:17,279 --> 00:28:27,180  
idea that it hasn't warmed in 15 years

600  
00:28:22,700 --> 00:28:29,850  
if you measure from 1998 to the present

601  
00:28:27,180 --> 00:28:32,700  
there's a there's a slight decline in

602  
00:28:29,849 --> 00:28:35,909  
temperature because 1998 was the super

603  
00:28:32,700 --> 00:28:39,120  
El Nino year and it was it was just

604  
00:28:35,910 --> 00:28:43,050  
unusually unusually warm el nene

605  
00:28:39,119 --> 00:28:45,149  
apartment and so they cherry pick that

606  
00:28:43,049 --> 00:28:46,619  
particular little statistic and then

607  
00:28:45,150 --> 00:28:49,470  
everything of course looks like it's

608  
00:28:46,619 --> 00:28:51,659  
regular whereas if you actually look at

609  
00:28:49,470 --> 00:28:53,940  
the trend if you actually plot the

610  
00:28:51,660 --> 00:28:56,580  
pitchers across the last 30 years it's

611  
00:28:53,940 --> 00:28:59,130  
clear that the line is going up it's

612  
00:28:56,579 --> 00:29:01,799  
gone straight up but if you only cherry

613  
00:28:59,130 --> 00:29:05,760

pick that one little 1998 date and look

614

00:29:01,799 --> 00:29:07,769

at it reference to the present oh look

615

00:29:05,759 --> 00:29:09,390

we have a plateau well you can find

616

00:29:07,769 --> 00:29:11,549

plateaus all the way through that

617

00:29:09,390 --> 00:29:13,800

30-year segment but that doesn't mean

618

00:29:11,549 --> 00:29:16,319

that that it's the services aren't

619

00:29:13,799 --> 00:29:23,730

getting warmer what what would it take

620

00:29:16,319 --> 00:29:26,009

to to sway them just going to have to be

621

00:29:23,730 --> 00:29:28,319

the evidence around them but we might

622

00:29:26,009 --> 00:29:31,170

have to say about the creationist could

623

00:29:28,319 --> 00:29:32,460

we not at all yeah if you think you're

624

00:29:31,170 --> 00:29:35,160

going to solve the climate change

625

00:29:32,460 --> 00:29:38,190

problem by shoveling more science at it

626

00:29:35,160 --> 00:29:40,470

you don't understand the problem it's

627

00:29:38,190 --> 00:29:43,950

like we were talking about earlier the

628  
00:29:40,470 --> 00:29:45,690  
reason why people reject good science of

629  
00:29:43,950 --> 00:29:50,700  
evolution good science of climate change

630  
00:29:45,690 --> 00:29:53,309  
is because of their ideologies if

631  
00:29:50,700 --> 00:29:55,529  
evolution is true if climate change is

632  
00:29:53,309 --> 00:29:57,509  
true in some fashion rather they lose

633  
00:29:55,529 --> 00:29:59,819  
big so if you're going to persuade

634  
00:29:57,509 --> 00:30:02,759  
somebody you have to first assuage that

635  
00:29:59,819 --> 00:30:05,669  
concern you have to make that person

636  
00:30:02,759 --> 00:30:08,670  
feel comfortable okay if evolution is

637  
00:30:05,670 --> 00:30:11,850  
true maybe I won't lose big okay what's

638  
00:30:08,670 --> 00:30:16,320  
the evidence and we've tried to do that

639  
00:30:11,849 --> 00:30:18,509  
for 30 years at NCSE by accurately

640  
00:30:16,319 --> 00:30:21,299  
pointing out the fact that not all

641  
00:30:18,509 --> 00:30:23,849  
Christians you know look at evolution as

642  
00:30:21,299 --> 00:30:25,349  
the enemy many of manage to integrate it

643  
00:30:23,849 --> 00:30:27,750  
into their theology similarly with

644  
00:30:25,349 --> 00:30:31,439  
climate change if you can help assuage

645  
00:30:27,750 --> 00:30:34,259  
this concern that somehow I'm going to

646  
00:30:31,440 --> 00:30:39,120  
lose my individual American freedoms

647  
00:30:34,259 --> 00:30:42,299  
whatever that is or somehow a more

648  
00:30:39,119 --> 00:30:46,469  
benign position that some deniers take I

649  
00:30:42,299 --> 00:30:49,710  
don't know how seriously but that unless

650  
00:30:46,470 --> 00:30:53,789  
we have carbon sources of energy we will

651  
00:30:49,710 --> 00:30:55,350  
not be able to to lift up the the poor

652  
00:30:53,789 --> 00:30:58,220  
and downtrodden and the people who are

653  
00:30:55,349 --> 00:31:02,119  
hungry and sick and and so forth around

654  
00:30:58,220 --> 00:31:03,860  
well you know if you can assuage those

655  
00:31:02,119 --> 00:31:06,288  
concerns whatever they are but they are

656

00:31:03,859 --> 00:31:07,788  
ideologically based and you have to

657  
00:31:06,288 --> 00:31:10,569  
assuage those concerns before the

658  
00:31:07,788 --> 00:31:13,339  
science even gets listen to yeah yeah

659  
00:31:10,569 --> 00:31:15,200  
once you get people to get the fingers

660  
00:31:13,339 --> 00:31:17,480  
out of the years sufficiently to listen

661  
00:31:15,200 --> 00:31:19,220  
to the science then you got a really

662  
00:31:17,480 --> 00:31:21,769  
good chance because the science is under

663  
00:31:19,220 --> 00:31:25,220  
say there's no question that the science

664  
00:31:21,769 --> 00:31:28,519  
is on our side yeah yeah what again it's

665  
00:31:25,220 --> 00:31:31,279  
these two streams that you're fighting

666  
00:31:28,519 --> 00:31:33,079  
are so similar in so many ways it's

667  
00:31:31,279 --> 00:31:37,009  
quite interesting that's why we took

668  
00:31:33,079 --> 00:31:42,558  
them out yeah yeah because they we were

669  
00:31:37,009 --> 00:31:46,308  
struck by how the ideological basis

670  
00:31:42,558 --> 00:31:48,470

which undergirds the rejection of solid

671

00:31:46,308 --> 00:31:50,779  
science with repercussions in the

672

00:31:48,470 --> 00:31:55,038  
education system that kind of that the

673

00:31:50,779 --> 00:31:56,950  
overarching framework there it was

674

00:31:55,038 --> 00:31:59,509  
exactly the same for both the

675

00:31:56,950 --> 00:32:02,419  
anti-evolution fight as well as the anti

676

00:31:59,509 --> 00:32:04,308  
climate change fight and we felt that

677

00:32:02,419 --> 00:32:07,250  
our experience in dealing with these

678

00:32:04,308 --> 00:32:09,558  
issues in the evolution context might be

679

00:32:07,250 --> 00:32:10,940  
helpful in helping teachers deal with

680

00:32:09,558 --> 00:32:16,038  
these issues and the climate change

681

00:32:10,940 --> 00:32:17,840  
context what's in your your time and

682

00:32:16,038 --> 00:32:19,329  
this sort of we will get back to the

683

00:32:17,839 --> 00:32:21,740  
original purpose which is the

684

00:32:19,329 --> 00:32:24,918  
creationism what have been the biggest

685  
00:32:21,740 --> 00:32:27,620  
strides forward do you think the things

686  
00:32:24,919 --> 00:32:31,450  
that that you know that it worked really

687  
00:32:27,619 --> 00:32:33,619  
well and something you can build on well

688  
00:32:31,450 --> 00:32:35,630  
realizing fairly early in the game

689  
00:32:33,619 --> 00:32:37,658  
actually the the structure of the

690  
00:32:35,630 --> 00:32:41,780  
arguments that are raised against us

691  
00:32:37,659 --> 00:32:43,400  
first of all attack the science the

692  
00:32:41,779 --> 00:32:45,950  
science is weak the science is not

693  
00:32:43,400 --> 00:32:48,048  
accepted by scientists you know this is

694  
00:32:45,950 --> 00:32:51,080  
all totally made out of Oh cloth but

695  
00:32:48,048 --> 00:32:53,569  
you've got to deal with it the second

696  
00:32:51,079 --> 00:32:56,298  
argument being an ideological argument

697  
00:32:53,569 --> 00:32:58,730  
you cannot be a good fill in the blank

698  
00:32:56,298 --> 00:33:00,349  
and still accept fill in the blank yeah

699  
00:32:58,730 --> 00:33:02,269  
you cannot be a good Republican without

700  
00:33:00,349 --> 00:33:03,408  
rejecting climate change you cannot be a

701  
00:33:02,269 --> 00:33:07,279  
good Christian without rejecting

702  
00:33:03,409 --> 00:33:10,669  
evolution and this dichotomous reasoning

703  
00:33:07,279 --> 00:33:12,980  
is what has been so toxic to

704  
00:33:10,669 --> 00:33:14,389  
you getting evolution accepted you know

705  
00:33:12,980 --> 00:33:15,798  
again if people think they're going to

706  
00:33:14,388 --> 00:33:17,839  
lose really big I've got to give up my

707  
00:33:15,798 --> 00:33:19,608  
faith in order to accept your science no

708  
00:33:17,839 --> 00:33:22,220  
way because my faith is really important

709  
00:33:19,608 --> 00:33:25,849  
to me and that's the way people so what

710  
00:33:22,220 --> 00:33:28,179  
you have to do is is present them with

711  
00:33:25,849 --> 00:33:31,158  
people who are of their same ideological

712  
00:33:28,179 --> 00:33:33,379  
persuasion who do accept it so you break

713

00:33:31,159 --> 00:33:35,119  
apart that dichotomy so that people are

714  
00:33:33,378 --> 00:33:37,069  
not thinking I have to be on one side of

715  
00:33:35,118 --> 00:33:39,528  
that line or another show people

716  
00:33:37,069 --> 00:33:41,628  
continua rather than dichotomies and

717  
00:33:39,528 --> 00:33:43,788  
we're doing that with the climate change

718  
00:33:41,628 --> 00:33:46,128  
thing as well there are Republicans who

719  
00:33:43,788 --> 00:33:50,388  
are green okay so it's a climate change

720  
00:33:46,128 --> 00:33:52,178  
they need to be made more their views

721  
00:33:50,388 --> 00:33:56,928  
need to be heard more frequently and

722  
00:33:52,179 --> 00:33:58,999  
then of course one position that

723  
00:33:56,929 --> 00:34:02,480  
resonates very strongly with Americans

724  
00:33:58,999 --> 00:34:04,190  
is the fairness idea well you know if

725  
00:34:02,480 --> 00:34:07,519  
you teach this just be fair and teach

726  
00:34:04,190 --> 00:34:09,318  
the other one and of course that's great

727  
00:34:07,519 --> 00:34:11,628

one to come you know let all sides be

728

00:34:09,318 --> 00:34:14,960

heard and that's great when it comes to

729

00:34:11,628 --> 00:34:17,659

opinions but you know don't confuse

730

00:34:14,960 --> 00:34:19,460

science with opinion it's not a matter

731

00:34:17,659 --> 00:34:22,159

of opinion whether the earth goes around

732

00:34:19,460 --> 00:34:24,139

the Sun or the Sun goes my mirror and we

733

00:34:22,159 --> 00:34:27,679

don't teach both opinions and in a

734

00:34:24,139 --> 00:34:29,298

fourth grade class yeah we teach what is

735

00:34:27,679 --> 00:34:31,579

accepted science and that's really what

736

00:34:29,298 --> 00:34:36,168

we're doing the false balance yeah yes

737

00:34:31,579 --> 00:34:37,970

falls in love because it's so normally

738

00:34:36,168 --> 00:34:40,190

wired into the culture but and it's so

739

00:34:37,969 --> 00:34:42,138

easy for media to do that if they want a

740

00:34:40,190 --> 00:34:44,838

copper story quickly the report all has

741

00:34:42,139 --> 00:34:46,490

to ring up to opposing whatever freedom

742  
00:34:44,838 --> 00:34:50,179  
together faces and that's actually a

743  
00:34:46,489 --> 00:34:53,209  
good thing I mean I I don't balance is

744  
00:34:50,179 --> 00:34:55,398  
important false balance yes is what you

745  
00:34:53,210 --> 00:34:57,650  
have to watch right yeah and I mean if

746  
00:34:55,398 --> 00:34:59,000  
somebody says that this way is up you

747  
00:34:57,650 --> 00:35:00,740  
don't need to interview somebody else

748  
00:34:59,000 --> 00:35:02,809  
says this way you know the other

749  
00:35:00,739 --> 00:35:05,000  
direction is down hmm that's that's

750  
00:35:02,809 --> 00:35:08,329  
false balance yeah and you know

751  
00:35:05,000 --> 00:35:10,309  
basically when you get ninety-seven

752  
00:35:08,329 --> 00:35:11,839  
percent of the science community saying

753  
00:35:10,309 --> 00:35:13,730  
yeah living things share common

754  
00:35:11,838 --> 00:35:15,739  
ancestors you don't have to find those

755  
00:35:13,730 --> 00:35:18,409  
two percent of the scientists who say no

756  
00:35:15,739 --> 00:35:21,889  
they didn't when you have your spell did

757  
00:35:18,409 --> 00:35:23,869  
you hear they laughed at Galileo Oh

758  
00:35:21,889 --> 00:35:26,359  
laughter bozo the clown yes this is carl

759  
00:35:23,869 --> 00:35:28,519  
sagan said i love that he was so good

760  
00:35:26,360 --> 00:35:30,890  
wasn't it yeah yeah I was what

761  
00:35:28,519 --> 00:35:33,079  
inspiration continuing inspiration to

762  
00:35:30,889 --> 00:35:35,690  
look very much so and isn't it wonderful

763  
00:35:33,079 --> 00:35:37,610  
that there's gonna be a new cosmos yeah

764  
00:35:35,690 --> 00:35:39,349  
renew Giroud about it for a while now

765  
00:35:37,610 --> 00:35:41,150  
looking forward to seeing you know when

766  
00:35:39,349 --> 00:35:43,730  
that goes I don't know when it's going

767  
00:35:41,150 --> 00:35:46,070  
to be released but I will be looking at

768  
00:35:43,730 --> 00:35:47,929  
it very yeah with much interest and of

769  
00:35:46,070 --> 00:35:51,650  
course I think what that will do also is

770

00:35:47,929 --> 00:35:54,079  
maybe inspire people to blow off the old

771  
00:35:51,650 --> 00:35:55,970  
videotapes that's good yeah I'm sure

772  
00:35:54,079 --> 00:35:57,469  
where I'm sure the original cosmos is

773  
00:35:55,969 --> 00:35:59,149  
online something I was just about to say

774  
00:35:57,469 --> 00:36:01,669  
just between you and me and thousands of

775  
00:35:59,150 --> 00:36:03,760  
listeners i think i think if you google

776  
00:36:01,670 --> 00:36:06,530  
cosmos carl sagan you could probably

777  
00:36:03,760 --> 00:36:08,600  
find it so maybe find it somewhere I

778  
00:36:06,530 --> 00:36:11,269  
wonder if Netflix as it what if no you

779  
00:36:08,599 --> 00:36:12,949  
know I think they'd is streamed it dies

780  
00:36:11,269 --> 00:36:15,289  
the map you guys think Netflix does

781  
00:36:12,949 --> 00:36:16,969  
might might be necessary to do that yeah

782  
00:36:15,289 --> 00:36:18,889  
I think well you mean get the new one

783  
00:36:16,969 --> 00:36:20,959  
the old one oh you're the old 1 i'm

784  
00:36:18,889 --> 00:36:22,819

pretty sure that would be fun yeah if

785

00:36:20,960 --> 00:36:26,570

then people can have easy access to it

786

00:36:22,820 --> 00:36:29,360

yeah oh well GD Scott next time I come

787

00:36:26,570 --> 00:36:31,160

to visit I guess I can interview your UK

788

00:36:29,360 --> 00:36:33,730

least one and you know you can come by

789

00:36:31,159 --> 00:36:37,099

and visit me too I might make you buy

790

00:36:33,730 --> 00:36:38,599

that's the invitation I can't refuse GD

791

00:36:37,099 --> 00:36:40,719

Scott thanks very much it's so good to

792

00:36:38,599 --> 00:36:40,719

see

793

00:37:01,079 --> 00:37:07,980

well here I am walking around the

794

00:37:03,369 --> 00:37:09,759

wonderful google campus area suburb

795

00:37:07,980 --> 00:37:12,099

subdivision whatever you'd like to call

796

00:37:09,760 --> 00:37:14,650

it in California I'm with Chris Rock

797

00:37:12,099 --> 00:37:17,469

Chris today hey guy Richard fellow

798

00:37:14,650 --> 00:37:20,110

Aussie who's here in this area have it

799

00:37:17,469 --> 00:37:23,409

always working walking this way and now

800

00:37:20,110 --> 00:37:25,210

you drop me a note you heard I was going

801

00:37:23,409 --> 00:37:26,859

to be in the bay area because we

802

00:37:25,210 --> 00:37:28,780

correspond it a little while ago you

803

00:37:26,860 --> 00:37:31,030

were in Japan and you came across power

804

00:37:28,780 --> 00:37:34,810

balance yes i did it was in a little way

805

00:37:31,030 --> 00:37:35,890

off I think it was her adjucha and I saw

806

00:37:34,809 --> 00:37:37,360

a whole heap of them there there was

807

00:37:35,889 --> 00:37:38,829

power balance and a couple of others and

808

00:37:37,360 --> 00:37:40,269

I thought this is something Richard

809

00:37:38,829 --> 00:37:42,670

might like so I found your email address

810

00:37:40,269 --> 00:37:45,969

and i sent you an email while i was

811

00:37:42,670 --> 00:37:47,950

still in tokyo and showed it to you yeah

812

00:37:45,969 --> 00:37:50,649

yeah i remembers I remember seeing the

813  
00:37:47,949 --> 00:37:52,119  
photograph it's funny I've in a box at

814  
00:37:50,650 --> 00:37:53,740  
home and I don't know what I'm gonna do

815  
00:37:52,119 --> 00:37:56,739  
with it I've probably got the world's

816  
00:37:53,739 --> 00:37:59,679  
biggest collection of these devices from

817  
00:37:56,739 --> 00:38:01,269  
all around the world and I must say I'm

818  
00:37:59,679 --> 00:38:03,219  
walking around here in Google reminding

819  
00:38:01,269 --> 00:38:04,809  
me that Google once had one I don't know

820  
00:38:03,219 --> 00:38:06,669  
if you knew that Google had a power

821  
00:38:04,809 --> 00:38:08,980  
ballad they had a band it's a google

822  
00:38:06,670 --> 00:38:10,420  
with a google local okay did that claim

823  
00:38:08,980 --> 00:38:12,880  
that it helped you with anything i hope

824  
00:38:10,420 --> 00:38:14,950  
not i don't think they did it hopefully

825  
00:38:12,880 --> 00:38:16,809  
not it might have been probably just a

826  
00:38:14,949 --> 00:38:17,980  
fashion statement also with that bigger

827

00:38:16,809 --> 00:38:20,019  
collection at home do you ever fall

828  
00:38:17,980 --> 00:38:24,219  
either you ever stumble no it's

829  
00:38:20,019 --> 00:38:26,409  
remarkable I'm in fact I can't fall over

830  
00:38:24,219 --> 00:38:27,759  
at all it everything's a breeze I've got

831  
00:38:26,409 --> 00:38:31,000  
more power and strength than the whole

832  
00:38:27,760 --> 00:38:34,360  
planet combiner but now that's quite an

833  
00:38:31,000 --> 00:38:35,650  
interesting story that hole how will

834  
00:38:34,360 --> 00:38:37,599  
just show you about it before because

835  
00:38:35,650 --> 00:38:39,789  
you really don't see them around

836  
00:38:37,599 --> 00:38:42,099  
although you can still find them yeah I

837  
00:38:39,789 --> 00:38:43,960  
saw some over here there was in sports

838  
00:38:42,099 --> 00:38:45,250  
store there was a big range of them I

839  
00:38:43,960 --> 00:38:46,869  
don't know if power balance was one of

840  
00:38:45,250 --> 00:38:48,460  
them but there was certainly at the

841  
00:38:46,869 --> 00:38:50,949

front there waiting for people to buy

842

00:38:48,460 --> 00:38:51,490

them yeah so would you were in Japan you

843

00:38:50,949 --> 00:38:53,529

see

844

00:38:51,489 --> 00:38:55,239

came across these they would power

845

00:38:53,530 --> 00:38:57,640

balance so what know where that were

846

00:38:55,239 --> 00:38:59,399

power balance they were in English so I

847

00:38:57,639 --> 00:39:02,079

think they were straight imports ah

848

00:38:59,400 --> 00:39:04,090

right do you recall when you were there

849

00:39:02,079 --> 00:39:05,529

seeing like other knock offs or copies

850

00:39:04,090 --> 00:39:07,000

or similar sort of thing yes they were

851

00:39:05,530 --> 00:39:08,560

along with them there were a couple of

852

00:39:07,000 --> 00:39:10,690

other brands I don't remember what they

853

00:39:08,559 --> 00:39:12,610

were I think they were all in English I

854

00:39:10,690 --> 00:39:15,309

don't think the Japanese maybe had their

855

00:39:12,610 --> 00:39:18,180

own interesting interesting because I've

856  
00:39:15,309 --> 00:39:20,769  
not been to Japan since all 1969 answers

857  
00:39:18,179 --> 00:39:23,379  
yeah that's a while that's a while is /

858  
00:39:20,769 --> 00:39:25,509  
and I wonder how prevalent this sort of

859  
00:39:23,380 --> 00:39:28,360  
thinking is when you were in Japan did

860  
00:39:25,510 --> 00:39:32,410  
you have many things that raised a

861  
00:39:28,360 --> 00:39:35,140  
skeptical eyebrow um not really there

862  
00:39:32,409 --> 00:39:37,118  
there's a lot of atheists over there I

863  
00:39:35,139 --> 00:39:39,629  
suppose there's a lot of temples my my

864  
00:39:37,119 --> 00:39:41,980  
wife is Japanese and she goes and praise

865  
00:39:39,630 --> 00:39:43,360  
sometimes like when there's a test

866  
00:39:41,980 --> 00:39:45,480  
coming up for a relative or something

867  
00:39:43,360 --> 00:39:47,559  
okay guys and get to one of those little

868  
00:39:45,480 --> 00:39:49,750  
scrolls and gives you talk to your

869  
00:39:47,559 --> 00:39:50,889  
future all right but apart from that I

870  
00:39:49,750 --> 00:39:54,070  
think the Japanese are a fairly

871  
00:39:50,889 --> 00:39:56,519  
skeptical one yeah yeah that's good to

872  
00:39:54,070 --> 00:39:59,170  
know because I've recently heard of a

873  
00:39:56,519 --> 00:40:00,730  
Japanese skeptics society or is it Tokyo

874  
00:39:59,170 --> 00:40:02,530  
skeptics in the pub something like that

875  
00:40:00,730 --> 00:40:04,240  
yeah yeah I think I heard of that when I

876  
00:40:02,530 --> 00:40:06,369  
was going over there I looked him up and

877  
00:40:04,239 --> 00:40:08,108  
I didn't manage to meet up with them but

878  
00:40:06,369 --> 00:40:11,230  
I think there are a few people over

879  
00:40:08,108 --> 00:40:12,880  
there who are the skeptical bent that's

880  
00:40:11,230 --> 00:40:16,179  
good to know it's because I was just too

881  
00:40:12,880 --> 00:40:17,740  
lovely day here it's a quite Barney for

882  
00:40:16,179 --> 00:40:19,539  
this time in the air to the middle of

883  
00:40:17,739 --> 00:40:24,509  
winter but it's lovely yeah just like

884

00:40:19,539 --> 00:40:26,889  
back home yeah almost not 40 degree

885  
00:40:24,510 --> 00:40:30,760  
thank goodness for that as we pass her

886  
00:40:26,889 --> 00:40:32,618  
another row of Google bicycles yeah

887  
00:40:30,760 --> 00:40:34,090  
they're very good there are really get

888  
00:40:32,619 --> 00:40:36,160  
you around the campus as a lot of

889  
00:40:34,090 --> 00:40:37,390  
different buildings around here and it's

890  
00:40:36,159 --> 00:40:38,980  
nice to be able to hop on one and then

891  
00:40:37,389 --> 00:40:41,079  
hop off at the other end well Chris

892  
00:40:38,980 --> 00:40:44,920  
thank you very much for sparing some

893  
00:40:41,079 --> 00:40:47,559  
time you're very welcome and I wish you

894  
00:40:44,920 --> 00:40:50,550  
every future success thank you very much

895  
00:40:47,559 --> 00:40:50,549  
you take

896  
00:41:00,469 --> 00:41:05,329  
hi I'm Finn and I'm Rebecca and where

897  
00:41:03,199 --> 00:41:07,098  
the skipper cons skipper Collins is an

898  
00:41:05,329 --> 00:41:08,779

Irish podcast by the Dublin skeptics

899

00:41:07,099 --> 00:41:10,340  
society it takes a conversational

900

00:41:08,780 --> 00:41:11,599  
reverent look at science news and

901

00:41:10,340 --> 00:41:15,108  
skeptical topics from an Irish

902

00:41:11,599 --> 00:41:18,130  
perspective you can find us at WWDC

903

00:41:15,108 --> 00:41:18,130  
arrogance calm

904

00:41:20,360 --> 00:41:26,730  
and now here's a little bit of news

905

00:41:22,829 --> 00:41:29,519  
about the impending visit of dr. Simon

906

00:41:26,730 --> 00:41:31,880  
Singh to Australia Simon's going to be

907

00:41:29,519 --> 00:41:35,639  
speaking around the country including

908

00:41:31,880 --> 00:41:38,970  
Sydney on Saturday the 11th of January

909

00:41:35,639 --> 00:41:42,170  
at five pm at the crown hotel The

910

00:41:38,969 --> 00:41:45,089  
Simpsons and their mathematical secrets

911

00:41:42,170 --> 00:41:48,420  
Simon Singh best-selling author of

912

00:41:45,090 --> 00:41:50,250  
thermos Last Theorem and the codebook

913  
00:41:48,420 --> 00:41:52,409  
that's a really good book i tellya the

914  
00:41:50,250 --> 00:41:54,539  
codebook it's fantastic we'll discuss

915  
00:41:52,409 --> 00:41:56,909  
his latest book The Simpsons and their

916  
00:41:54,539 --> 00:41:59,309  
mathematical secrets you can find out

917  
00:41:56,909 --> 00:42:02,099  
more by visiting the Australian skeptics

918  
00:41:59,309 --> 00:42:05,070  
Sydney skeptics in the pub meet up and

919  
00:42:02,099 --> 00:42:08,099  
not long after that on the 17th of

920  
00:42:05,070 --> 00:42:12,030  
January at 4pm at the Japan theatre

921  
00:42:08,099 --> 00:42:15,179  
Questacon in Canberra Simon will be also

922  
00:42:12,030 --> 00:42:17,760  
giving that talk the simpsons and their

923  
00:42:15,179 --> 00:42:21,419  
mathematical secrets and you can find

924  
00:42:17,760 --> 00:42:24,570  
out more about that visit by googling

925  
00:42:21,420 --> 00:42:27,119  
canberra skeptics Canberra skeptics are

926  
00:42:24,570 --> 00:42:29,430  
also having a BBQ and a free screening

927  
00:42:27,119 --> 00:42:33,029  
of flock of dodos on sunday the

928  
00:42:29,429 --> 00:42:35,279  
nineteenth of january from one to three

929  
00:42:33,030 --> 00:42:38,220  
o'clock and that will also be the

930  
00:42:35,280 --> 00:42:46,200  
Questacon google Canberra skeptics for

931  
00:42:38,219 --> 00:42:47,669  
more information here's may not spooky

932  
00:42:46,199 --> 00:42:50,779  
action

933  
00:42:47,670 --> 00:42:50,780  
at the distance

934  
00:42:51,630 --> 00:42:55,358  
of course everyone's talking about

935  
00:42:53,769 --> 00:42:56,829  
conspiracies but a conspiracy that I was

936  
00:42:55,358 --> 00:42:57,909  
calling for years of course and no one

937  
00:42:56,829 --> 00:43:00,759  
ever listened to me was the fact that

938  
00:42:57,909 --> 00:43:02,889  
the NSA was spying on people even have

939  
00:43:00,760 --> 00:43:04,960  
floated this one with Steve how I am

940  
00:43:02,889 --> 00:43:06,879  
your cryptology is your thing isn't it

941

00:43:04,960 --> 00:43:08,889  
it was yeah I've retired now that I was

942  
00:43:06,880 --> 00:43:11,530  
I was a code breaker in my time and I'm

943  
00:43:08,889 --> 00:43:13,299  
in peacetime this was another yeah I

944  
00:43:11,530 --> 00:43:15,339  
remember I was saying to you I was

945  
00:43:13,300 --> 00:43:17,109  
pretty I had to be pretty sure the NSA

946  
00:43:15,338 --> 00:43:18,460  
could crack any code anywhere and you

947  
00:43:17,108 --> 00:43:20,858  
were saying that no matter how good you

948  
00:43:18,460 --> 00:43:23,079  
are you can't always do that now most of

949  
00:43:20,858 --> 00:43:24,909  
the codes are not crackable I mean the

950  
00:43:23,079 --> 00:43:26,409  
people who design codes of even sharp

951  
00:43:24,909 --> 00:43:28,569  
and the people who in fact them so the

952  
00:43:26,409 --> 00:43:30,039  
you can't crack the codes so is the case

953  
00:43:28,570 --> 00:43:31,990  
that the NSA has got this by using

954  
00:43:30,039 --> 00:43:33,550  
backdoor means rather than brute force

955  
00:43:31,989 --> 00:43:35,108

cracking there's all sorts of ways of

956

00:43:33,550 --> 00:43:37,089

cheating like you planted bugs in the

957

00:43:35,108 --> 00:43:39,309

code machines or you bug the keyboard

958

00:43:37,088 --> 00:43:41,500

the people type on or you you've been to

959

00:43:39,309 --> 00:43:43,929

room upstairs they move it the room

960

00:43:41,500 --> 00:43:47,530

above the embassy and listen for noises

961

00:43:43,929 --> 00:43:49,809

you know people conversation everybody

962

00:43:47,530 --> 00:43:51,130

cheats all the time this is that the

963

00:43:49,809 --> 00:43:52,809

book put them the most bleeding obvious

964

00:43:51,130 --> 00:43:54,608

things it's the pyramids were built you

965

00:43:52,809 --> 00:43:57,429

know everybody spies and everybody else

966

00:43:54,608 --> 00:43:59,108

all the time and you shouldn't get

967

00:43:57,429 --> 00:44:01,659

caught but people do you know and

968

00:43:59,108 --> 00:44:03,279

there's famous incidents of sort of

969

00:44:01,659 --> 00:44:05,079

think the Russians crashed a submarine

970  
00:44:03,280 --> 00:44:07,269  
on the coast of Sweden in under an 81

971  
00:44:05,079 --> 00:44:09,309  
and what what really annoys the Swedes

972  
00:44:07,269 --> 00:44:11,349  
was it was a very old and a scruffy

973  
00:44:09,309 --> 00:44:13,630  
submarine and they were going to be

974  
00:44:11,349 --> 00:44:15,030  
spied on by a more dignified submarine

975  
00:44:13,630 --> 00:44:16,769  
than that one

976  
00:44:15,030 --> 00:44:19,470  
and but what do you think is the

977  
00:44:16,769 --> 00:44:21,539  
simplest and most effective code you've

978  
00:44:19,469 --> 00:44:25,279  
heard of in all your years of cryptology

979  
00:44:21,539 --> 00:44:27,659  
a lot to kill you if I told you that

980  
00:44:25,280 --> 00:44:29,430  
because sometimes the simple ones are

981  
00:44:27,659 --> 00:44:30,809  
amazingly effective amp they are the

982  
00:44:29,429 --> 00:44:32,309  
most simple ones are the most effective

983  
00:44:30,809 --> 00:44:34,949  
if you make it more complicated like a

984  
00:44:32,309 --> 00:44:36,989  
bulk cedral you open up more chinks in

985  
00:44:34,949 --> 00:44:40,019  
it you know there's going to be a good

986  
00:44:36,989 --> 00:44:42,449  
design but actually I'm oh all modern

987  
00:44:40,019 --> 00:44:47,429  
commercial codes are pretty safe RSA in

988  
00:44:42,449 --> 00:44:49,500  
Triple D Azur safe eh ESS safe the best

989  
00:44:47,429 --> 00:44:52,769  
code for view and I'd assault with is a

990  
00:44:49,500 --> 00:44:54,690  
jargon code where you you don't talk

991  
00:44:52,769 --> 00:44:56,280  
about cocaine you talk about sugar or

992  
00:44:54,690 --> 00:44:57,840  
something you know all right have you

993  
00:44:56,280 --> 00:45:01,170  
got that packet of sugar from Colombia i

994  
00:44:57,840 --> 00:45:02,670  
sent you had a non a minute columbia

995  
00:45:01,170 --> 00:45:04,680  
isn't a sugar exporting nation people

996  
00:45:02,670 --> 00:45:07,349  
say I didn't mean can be i'm in time in

997  
00:45:04,679 --> 00:45:09,960  
some afghanistan no no no no go back on

998

00:45:07,349 --> 00:45:11,549  
that even worse if a job and co where

999  
00:45:09,960 --> 00:45:13,289  
you just agree that would be in other

1000  
00:45:11,550 --> 00:45:15,690  
words and nobody can crack that if you

1001  
00:45:13,289 --> 00:45:17,519  
do it well and what do you think will be

1002  
00:45:15,690 --> 00:45:19,980  
the most interesting conspiracy that

1003  
00:45:17,519 --> 00:45:22,349  
will be brought to light here while

1004  
00:45:19,980 --> 00:45:25,199  
we're in canberra this weekend water

1005  
00:45:22,349 --> 00:45:26,549  
life yeah ivan brought to lie i mean is

1006  
00:45:25,199 --> 00:45:27,509  
it one conspiracy you find very

1007  
00:45:26,550 --> 00:45:31,230  
interesting you're hoping they might

1008  
00:45:27,510 --> 00:45:33,120  
talk about oh yeah love so you're hiding

1009  
00:45:31,230 --> 00:45:34,409  
figures on climate change probably over

1010  
00:45:33,119 --> 00:45:36,869  
that's some of the ones begin to be

1011  
00:45:34,409 --> 00:45:39,449  
discovered in that he wants to find that

1012  
00:45:36,869 --> 00:45:41,069

and there's a danger here if you want to

1013

00:45:39,449 --> 00:45:43,710

find something there you will find it if

1014

00:45:41,070 --> 00:45:45,600

you will enough numbers you know what

1015

00:45:43,710 --> 00:45:46,949

about a conspiracy that appears to be

1016

00:45:45,599 --> 00:45:49,500

lacking in evidence that you personally

1017

00:45:46,949 --> 00:45:51,379

wouldn't mind if it was true Oh a free

1018

00:45:49,500 --> 00:45:54,949

beer the fee beer plot or something

1019

00:45:51,380 --> 00:45:57,259

you know how much more popular would Guy

1020

00:45:54,949 --> 00:45:59,088

Fawkes be if he'd had a free beer plot

1021

00:45:57,259 --> 00:46:02,539

instead of gunpowder he'd be even more

1022

00:45:59,088 --> 00:46:03,768

famous only way a guy fawkes had a you

1023

00:46:02,539 --> 00:46:05,450

know he had the most brilliant ideas

1024

00:46:03,768 --> 00:46:08,028

anybody was in the same place you say

1025

00:46:05,449 --> 00:46:09,919

you had to all the whole house of

1026

00:46:08,028 --> 00:46:12,318

commons the whole house of lords the

1027  
00:46:09,920 --> 00:46:15,318  
monarch all the bishops all the lords

1028  
00:46:12,318 --> 00:46:17,750  
everybody in one place you just cried

1029  
00:46:15,318 --> 00:46:19,518  
out for a bit of gunpowder and hit a

1030  
00:46:17,750 --> 00:46:21,858  
secure the locks in he had the gunpowder

1031  
00:46:19,518 --> 00:46:23,328  
and he didn't do it and I've i betchu it

1032  
00:46:21,858 --> 00:46:24,858  
as he was being drawn in quarter you

1033  
00:46:23,329 --> 00:46:26,390  
probably wish you Jesus maybe I should

1034  
00:46:24,858 --> 00:46:27,259  
have gone early on that one you should

1035  
00:46:26,389 --> 00:46:28,989  
have gone that you're the day before

1036  
00:46:27,259 --> 00:46:31,548  
would have been really good you know

1037  
00:46:28,989 --> 00:46:34,038  
have a good time here and what do you

1038  
00:46:31,548 --> 00:46:36,079  
look credible in what way is the camera

1039  
00:46:34,039 --> 00:46:38,599  
convention got a different feel this is

1040  
00:46:36,079 --> 00:46:40,278  
a very good venue it's inside csiro it's

1041  
00:46:38,599 --> 00:46:42,500  
built for education it's got good

1042  
00:46:40,278 --> 00:46:43,759  
facilities and good meeting room good

1043  
00:46:42,500 --> 00:46:46,278  
coffee or everything laid out very

1044  
00:46:43,759 --> 00:46:48,230  
accessible maybe advice and cheerful and

1045  
00:46:46,278 --> 00:46:51,559  
not at all like that sort of dreaming

1046  
00:46:48,230 --> 00:46:53,150  
lecture halls on my youth obviously so

1047  
00:46:51,559 --> 00:46:55,430  
it's a lovely venue and the people of

1048  
00:46:53,150 --> 00:46:57,470  
vibrant you know a lot of guys here from

1049  
00:46:55,429 --> 00:46:59,419  
Melbourne and Sydney the Melbourne ones

1050  
00:46:57,469 --> 00:47:01,219  
are especially exciting people and in

1051  
00:46:59,420 --> 00:47:05,298  
for a certain jealous a quarter you

1052  
00:47:01,219 --> 00:47:06,649  
myself example and yeah awesome all over

1053  
00:47:05,298 --> 00:47:08,480  
the place in a look at you in your in

1054  
00:47:06,650 --> 00:47:10,039  
your Melbourne fashionable shirt lording

1055

00:47:08,480 --> 00:47:13,039  
it over us that's right in the short

1056  
00:47:10,039 --> 00:47:16,130  
trousers I it's sunny 1c every year in

1057  
00:47:13,039 --> 00:47:17,778  
Melbourne is sunnier well talking

1058  
00:47:16,130 --> 00:47:19,789  
talking talking now a lot of that goes

1059  
00:47:17,778 --> 00:47:21,079  
on here at the National skeptics

1060  
00:47:19,789 --> 00:47:23,390  
conference it's it's just after

1061  
00:47:21,079 --> 00:47:25,400  
afternoon tea on saturday and i'm here

1062  
00:47:23,389 --> 00:47:26,929  
with the poet laureate now what are we

1063  
00:47:25,400 --> 00:47:28,940  
doing with the poet laureate with the

1064  
00:47:26,929 --> 00:47:31,009  
skeptics mean really I mean art poetry

1065  
00:47:28,940 --> 00:47:32,059  
science they're not good bedfellows in

1066  
00:47:31,009 --> 00:47:33,170  
fact it would be a threesome if they

1067  
00:47:32,059 --> 00:47:35,690  
were through them anyway that's a bad

1068  
00:47:33,170 --> 00:47:38,210  
metaphor hello hello what's your

1069  
00:47:35,690 --> 00:47:40,220

official title in name my name is

1070

00:47:38,210 --> 00:47:42,829

Shelley stockin and I am the poet in

1071

00:47:40,219 --> 00:47:45,259

residence at the skeptics convention you

1072

00:47:42,829 --> 00:47:48,410

live in their Clubhouse no no they let

1073

00:47:45,259 --> 00:47:50,019

me out occasionally meal times but I

1074

00:47:48,409 --> 00:47:52,129

because I have no scientific

1075

00:47:50,018 --> 00:47:55,278

qualifications and can't pronounce most

1076

00:47:52,130 --> 00:47:57,108

of the words I am I just write in rhyme

1077

00:47:55,278 --> 00:47:57,489

that's the skill I bring I've got

1078

00:47:57,108 --> 00:47:59,199

nothing

1079

00:47:57,489 --> 00:48:00,849

else look the only big word i know is

1080

00:47:59,199 --> 00:48:04,210

transubstantiation and that's not very

1081

00:48:00,849 --> 00:48:08,159

scientific no no not that I'm aware of I

1082

00:48:04,210 --> 00:48:10,539

know how to say yummy wafers and trans

1083

00:48:08,159 --> 00:48:11,710

substantive it that's good now you've

1084  
00:48:10,539 --> 00:48:13,239  
done a couple of poems and they've all

1085  
00:48:11,710 --> 00:48:15,400  
been received very well by the audience

1086  
00:48:13,239 --> 00:48:16,889  
there did you were these ones of a pre

1087  
00:48:15,400 --> 00:48:20,320  
done or did you choose some particular

1088  
00:48:16,889 --> 00:48:21,759  
skeptical based topics well I I was a

1089  
00:48:20,320 --> 00:48:23,380  
little bit of a stalker of some of the

1090  
00:48:21,760 --> 00:48:25,780  
speakers and asked what the topics would

1091  
00:48:23,380 --> 00:48:28,930  
be before the program came out so I had

1092  
00:48:25,780 --> 00:48:31,000  
an idea because they they might take 10

1093  
00:48:28,929 --> 00:48:33,219  
seconds to deliver but they take me two

1094  
00:48:31,000 --> 00:48:35,409  
or three weeks to write around you know

1095  
00:48:33,219 --> 00:48:37,689  
living and working in that sort of thing

1096  
00:48:35,409 --> 00:48:39,190  
that the one you just delivered then was

1097  
00:48:37,690 --> 00:48:41,039  
a title I don't know what was that

1098  
00:48:39,190 --> 00:48:44,019  
called was called the I don't know hole

1099  
00:48:41,039 --> 00:48:46,000  
it talks about when we don't know the

1100  
00:48:44,019 --> 00:48:49,420  
answer to something humans tend to fill

1101  
00:48:46,000 --> 00:48:51,130  
it with absolute chart and so it was and

1102  
00:48:49,420 --> 00:48:55,000  
that's why we have paranormal beliefs

1103  
00:48:51,130 --> 00:48:56,829  
and and you know think conspiracy

1104  
00:48:55,000 --> 00:48:59,349  
theories that they come up because we we

1105  
00:48:56,829 --> 00:49:01,389  
can't stand not to know the answer to

1106  
00:48:59,349 --> 00:49:03,130  
something so we make one up as a poet

1107  
00:49:01,389 --> 00:49:04,690  
you've obviously worked to a wide range

1108  
00:49:03,130 --> 00:49:06,700  
of audiences one of these skeptical

1109  
00:49:04,690 --> 00:49:08,679  
audience like to work to as a reading

1110  
00:49:06,699 --> 00:49:11,799  
poetry there they tough crowd now

1111  
00:49:08,679 --> 00:49:15,489  
they're quite good because I I've sort

1112

00:49:11,800 --> 00:49:17,530  
of been brought up skeptical I know what

1113  
00:49:15,489 --> 00:49:20,379  
makes people nod their heads in this

1114  
00:49:17,530 --> 00:49:22,990  
crowd and hopefully giggle at the right

1115  
00:49:20,380 --> 00:49:25,840  
spots so I find this crowd quite good

1116  
00:49:22,989 --> 00:49:27,819  
when I read to other poets they're not

1117  
00:49:25,840 --> 00:49:29,470  
not as interested let's face it other

1118  
00:49:27,820 --> 00:49:31,240  
poets are just there to do their poem

1119  
00:49:29,469 --> 00:49:34,000  
and then bugger off home yes well that's

1120  
00:49:31,239 --> 00:49:36,669  
partly why I'm here but no now what is

1121  
00:49:34,000 --> 00:49:38,289  
your favourite conspiracy that despite

1122  
00:49:36,670 --> 00:49:42,430  
lack of evidence you really wish was

1123  
00:49:38,289 --> 00:49:44,349  
true I like Kim trails but I think

1124  
00:49:42,429 --> 00:49:46,839  
they're hilarious I don't necessarily

1125  
00:49:44,349 --> 00:49:48,230  
wish they were true except then I would

1126  
00:49:46,840 --> 00:49:50,660

know

1127

00:49:48,230 --> 00:49:53,530

how the hell people think that claims

1128

00:49:50,659 --> 00:49:57,409

can spray us with with nefarious things

1129

00:49:53,530 --> 00:49:59,720

but I also one that I came up that came

1130

00:49:57,409 --> 00:50:02,690

across with with currants day this

1131

00:49:59,719 --> 00:50:04,639

morning was the prepper movement so no

1132

00:50:02,690 --> 00:50:07,480

matter what the conspiracy that brings

1133

00:50:04,639 --> 00:50:11,358

the world to its end these people who

1134

00:50:07,480 --> 00:50:14,000

they stockpile guns and food and and

1135

00:50:11,358 --> 00:50:17,358

very strange armored vehicles to deal

1136

00:50:14,000 --> 00:50:19,460

with with other people when the world

1137

00:50:17,358 --> 00:50:21,199

comes to an end I've interviewed a

1138

00:50:19,460 --> 00:50:22,760

pepper on the on the planet Maynard

1139

00:50:21,199 --> 00:50:25,250

podcast who was actually on the show

1140

00:50:22,760 --> 00:50:26,690

Preppers and he explained that I said

1141  
00:50:25,250 --> 00:50:27,800  
how can you live life like that when he

1142  
00:50:26,690 --> 00:50:30,530  
said that's a very odd thing for you to

1143  
00:50:27,800 --> 00:50:31,910  
say because he said an emergency could

1144  
00:50:30,530 --> 00:50:33,859  
happen at any time it might not be a

1145  
00:50:31,909 --> 00:50:35,509  
planetary one like some of us prepare

1146  
00:50:33,858 --> 00:50:37,369  
for but he says when he takes his kids

1147  
00:50:35,510 --> 00:50:39,050  
out to prepare he's basically taking

1148  
00:50:37,369 --> 00:50:41,000  
them camping him and learning skills

1149  
00:50:39,050 --> 00:50:42,500  
that they can use for other things so

1150  
00:50:41,000 --> 00:50:44,239  
I'd say that would be their defense to a

1151  
00:50:42,500 --> 00:50:46,159  
certain extent obviously if you got the

1152  
00:50:44,239 --> 00:50:47,659  
entire house full of things that's

1153  
00:50:46,159 --> 00:50:49,460  
probably impacting on your lifestyle a

1154  
00:50:47,659 --> 00:50:52,519  
bit but you do learn some vital skills

1155  
00:50:49,460 --> 00:50:54,940  
in in prepping that's true it reminds me

1156  
00:50:52,519 --> 00:50:58,340  
a little bit of boy scouts but with guns

1157  
00:50:54,940 --> 00:51:00,380  
but personally if I thought the world

1158  
00:50:58,340 --> 00:51:02,090  
was going to come to an end the money

1159  
00:51:00,380 --> 00:51:04,130  
that Preppers spend on being prepped I

1160  
00:51:02,090 --> 00:51:06,680  
probably just put just a few really nice

1161  
00:51:04,130 --> 00:51:08,358  
substances and blow my head off okay

1162  
00:51:06,679 --> 00:51:09,858  
yeah I was going to suggest this to the

1163  
00:51:08,358 --> 00:51:11,539  
prepper but I got a feeling that you

1164  
00:51:09,858 --> 00:51:12,769  
know that's not what wouldn't go on well

1165  
00:51:11,539 --> 00:51:14,210  
with him I thought well you look I mean

1166  
00:51:12,769 --> 00:51:15,500  
that might be okay for you mate but I

1167  
00:51:14,210 --> 00:51:19,190  
can't live in a tent at the best of

1168  
00:51:15,500 --> 00:51:21,920  
times and maybe I just I just prefer to

1169

00:51:19,190 --> 00:51:23,720  
spend my money on fun things yeah I

1170  
00:51:21,920 --> 00:51:25,309  
could go with that speaking of fun

1171  
00:51:23,719 --> 00:51:27,409  
things here that left a lot of those

1172  
00:51:25,309 --> 00:51:29,539  
pre-wrapped biscuits here after the

1173  
00:51:27,409 --> 00:51:31,250  
afternoon tea haven't they yes maybe

1174  
00:51:29,539 --> 00:51:33,170  
they're preparing for dinner just not

1175  
00:51:31,250 --> 00:51:35,750  
feeling up tummies yeah I think I might

1176  
00:51:33,170 --> 00:51:37,070  
I might do some prepping myself and leg

1177  
00:51:35,750 --> 00:51:38,780  
off with about a dozen of these biscuits

1178  
00:51:37,070 --> 00:51:39,920  
and I'll be right oh hang on one of the

1179  
00:51:38,780 --> 00:51:41,630  
controversial questions I have been

1180  
00:51:39,920 --> 00:51:43,700  
asking people as it is a doctor who

1181  
00:51:41,630 --> 00:51:45,500  
themed dinner this evening who do you

1182  
00:51:43,699 --> 00:51:48,199  
think would go down in your opinion as

1183  
00:51:45,500 --> 00:51:49,619

your opinion only as the unpopular

1184

00:51:48,199 --> 00:51:52,000

doctor

1185

00:51:49,619 --> 00:51:54,549

well I haven't actually watched Doctor

1186

00:51:52,000 --> 00:51:58,420

Who since the 70s I have you heard it

1187

00:51:54,550 --> 00:52:00,820

here first so I can hardly I know that

1188

00:51:58,420 --> 00:52:04,170

my favorite is even will always be Tom

1189

00:52:00,820 --> 00:52:06,730

Baker so I'm you anyone before or after

1190

00:52:04,170 --> 00:52:08,500

although david tennant for different

1191

00:52:06,730 --> 00:52:12,219

reasons oh ok just because of eye candy

1192

00:52:08,500 --> 00:52:14,019

oh ok he'd be the popular on for you for

1193

00:52:12,219 --> 00:52:15,339

me yeah he meant Tom Baker right okay

1194

00:52:14,019 --> 00:52:17,230

but the say you couldn't put you

1195

00:52:15,340 --> 00:52:19,120

couldn't put your finger on an unpopular

1196

00:52:17,230 --> 00:52:21,099

doctor so look I've been trying to get a

1197

00:52:19,119 --> 00:52:23,409

vote going for Colin Baker not because I

1198  
00:52:21,099 --> 00:52:26,469  
was a nice guy but I think his doctor

1199  
00:52:23,409 --> 00:52:28,629  
was a fairly an unusual one I'll just

1200  
00:52:26,469 --> 00:52:31,239  
not if it I know that doesn't work on a

1201  
00:52:28,630 --> 00:52:32,769  
podcast I just know she's been with

1202  
00:52:31,239 --> 00:52:33,909  
skeptics in this science bunch long

1203  
00:52:32,769 --> 00:52:36,159  
enough to know that if she doesn't know

1204  
00:52:33,909 --> 00:52:37,480  
what's going on just nod that's right

1205  
00:52:36,159 --> 00:52:39,549  
and it works with your auntie and uncle

1206  
00:52:37,480 --> 00:52:40,900  
too that's right i'm actually staying

1207  
00:52:39,550 --> 00:52:43,410  
with my auntie here in Canberra I might

1208  
00:52:40,900 --> 00:52:43,410  
try that later

1209  
00:52:57,690 --> 00:53:01,838  
hey this is jay novella from the

1210  
00:53:00,190 --> 00:53:03,760  
skeptics guide to the universe podcast

1211  
00:53:01,838 --> 00:53:05,588  
did you know that there are thousands of

1212  
00:53:03,760 --> 00:53:07,329  
skeptical reports interviews and

1213  
00:53:05,588 --> 00:53:10,029  
investigations going back to nineteen

1214  
00:53:07,329 --> 00:53:13,300  
eighty one free to download just visit w

1215  
00:53:10,030 --> 00:53:15,220  
WC optics com a you click the

1216  
00:53:13,300 --> 00:53:17,170  
publications link and enjoy almost every

1217  
00:53:15,219 --> 00:53:19,118  
back issue of the skeptic the journal

1218  
00:53:17,170 --> 00:53:20,680  
from Australian skeptics you can also

1219  
00:53:19,119 --> 00:53:22,960  
subscribe online and get the latest

1220  
00:53:20,679 --> 00:53:24,969  
digital or hard copy of this the world's

1221  
00:53:22,960 --> 00:53:28,659  
second oldest skeptical magazine that's

1222  
00:53:24,969 --> 00:53:37,838  
ww skeptics com au or just google

1223  
00:53:28,659 --> 00:53:40,000  
Australian skeptics in this week's a

1224  
00:53:37,838 --> 00:53:41,889  
week in science guest host robert

1225  
00:53:40,000 --> 00:53:44,289  
Llewellyn better known as Crichton from

1226

00:53:41,889 --> 00:53:46,210  
Red Dwarf talks with Peter Putney from

1227  
00:53:44,289 --> 00:53:51,009  
the University of South Australia about

1228  
00:53:46,210 --> 00:53:53,260  
Trev the world beating electric car Trev

1229  
00:53:51,010 --> 00:53:54,910  
was built by a very talented team at the

1230  
00:53:53,260 --> 00:53:56,890  
University of South Australia led by

1231  
00:53:54,909 --> 00:53:58,509  
this extremely talented man Peter pudney

1232  
00:53:56,889 --> 00:53:59,889  
so Peter can you tell me what the

1233  
00:53:58,510 --> 00:54:02,020  
original sort of motivation was for

1234  
00:53:59,889 --> 00:54:04,328  
building this yeah we used to build

1235  
00:54:02,019 --> 00:54:06,759  
solar racing cars that race from Darwin

1236  
00:54:04,329 --> 00:54:08,200  
to Adelaide across Australia yeah and we

1237  
00:54:06,760 --> 00:54:09,970  
figured if we could drive from Darwin to

1238  
00:54:08,199 --> 00:54:11,139  
a blade without using petrol we should

1239  
00:54:09,969 --> 00:54:13,598  
be able get to work and back with in

1240  
00:54:11,139 --> 00:54:14,858

using petrol right we wanted a car that

1241

00:54:13,599 --> 00:54:17,109

we could use all the time for just

1242

00:54:14,858 --> 00:54:19,299

driving around town that didn't use

1243

00:54:17,108 --> 00:54:20,619

fossil fuels right and so I mean tell

1244

00:54:19,300 --> 00:54:22,240

just go through a few of the things

1245

00:54:20,619 --> 00:54:24,430

because I've driven a few electric cars

1246

00:54:22,239 --> 00:54:26,379

I've never driven one like this it's

1247

00:54:24,429 --> 00:54:28,929

slightly different so I mean in terms of

1248

00:54:26,380 --> 00:54:30,190

batteries and range and all those things

1249

00:54:28,929 --> 00:54:31,299

I mean what what are the batteries that

1250

00:54:30,190 --> 00:54:33,159

you've used it so it's a lithium-ion

1251

00:54:31,300 --> 00:54:35,200

polymer battery about 80 kilograms and

1252

00:54:33,159 --> 00:54:37,358

it's got a range of over 200 kilometers

1253

00:54:35,199 --> 00:54:38,919

wow that's really good that's a very

1254

00:54:37,358 --> 00:54:40,358

healthy range i mean there's quite a lot

1255  
00:54:38,920 --> 00:54:41,440  
of commercially available electric

1256  
00:54:40,358 --> 00:54:43,598  
vehicles that haven't got that kind of

1257  
00:54:41,440 --> 00:54:45,369  
rain yeah and the secret is it's 300

1258  
00:54:43,599 --> 00:54:47,050  
kilograms all up for the car so it

1259  
00:54:45,369 --> 00:54:48,818  
doesn't take a lot of energy to push it

1260  
00:54:47,050 --> 00:54:51,400  
along the road and what sort of speeds

1261  
00:54:48,818 --> 00:54:53,108  
does it you know is it road legal it

1262  
00:54:51,400 --> 00:54:54,880  
clear on roads it's road legal it will

1263  
00:54:53,108 --> 00:54:56,318  
drive at normal ride speed sorry top

1264  
00:54:54,880 --> 00:54:58,119  
speed is over a hundred kilometres now

1265  
00:54:56,318 --> 00:55:00,519  
right so Peter I'm intrigued by the

1266  
00:54:58,119 --> 00:55:02,470  
design because it's I think I think it's

1267  
00:55:00,519 --> 00:55:05,530  
very unusual not what people are used to

1268  
00:55:02,469 --> 00:55:06,669  
with cars three wheels and then

1269  
00:55:05,530 --> 00:55:08,530  
the passages sitting behind the driver

1270  
00:55:06,670 --> 00:55:09,970  
and one can you explain why those

1271  
00:55:08,530 --> 00:55:11,680  
decisions were made there were two

1272  
00:55:09,969 --> 00:55:13,839  
reasons for that really first is we knew

1273  
00:55:11,679 --> 00:55:16,480  
that it had to be lightweight and it had

1274  
00:55:13,840 --> 00:55:17,920  
to be aerodynamic so having the the

1275  
00:55:16,480 --> 00:55:19,150  
dryer of having the passenger behind the

1276  
00:55:17,920 --> 00:55:21,820  
driver means that we can get good

1277  
00:55:19,150 --> 00:55:23,500  
aerodynamics three wheels if you've got

1278  
00:55:21,820 --> 00:55:25,059  
two wheels it will fall over if you've

1279  
00:55:23,500 --> 00:55:26,889  
got four you've got more weight and more

1280  
00:55:25,059 --> 00:55:29,049  
complexity than you need and does and so

1281  
00:55:26,889 --> 00:55:31,029  
having one person behind the other

1282  
00:55:29,050 --> 00:55:33,730  
basically means that the bit that's

1283

00:55:31,030 --> 00:55:35,920  
pushing into the wind is reduced you can

1284  
00:55:33,730 --> 00:55:37,539  
keep that now yeah and it also it gives

1285  
00:55:35,920 --> 00:55:39,670  
the driver a really good view of the

1286  
00:55:37,539 --> 00:55:41,800  
road there's no a-pillars yeah most of

1287  
00:55:39,670 --> 00:55:43,240  
the time most people driving in in

1288  
00:55:41,800 --> 00:55:45,370  
Australia have just one person in the

1289  
00:55:43,239 --> 00:55:46,569  
car yes going to working back so we

1290  
00:55:45,369 --> 00:55:48,099  
don't often use the back seat but it's

1291  
00:55:46,570 --> 00:55:49,660  
there in case you're right and I mean

1292  
00:55:48,099 --> 00:55:50,980  
what else have you done with it so since

1293  
00:55:49,659 --> 00:55:53,170  
you built it and presumably haven't just

1294  
00:55:50,980 --> 00:55:54,809  
driven it around the campus we've done

1295  
00:55:53,170 --> 00:55:57,039  
very little driving around the campus we

1296  
00:55:54,809 --> 00:55:58,809  
the students that build it actually took

1297  
00:55:57,039 --> 00:56:01,029

it to Darwin and drove it from Darwin to

1298

00:55:58,809 --> 00:56:02,889

a blade demonstration class and the

1299

00:56:01,030 --> 00:56:04,030

world solar challenge once we've done

1300

00:56:02,889 --> 00:56:05,980

that I got a phone call from someone

1301

00:56:04,030 --> 00:56:07,510

saying is it any good for long trips and

1302

00:56:05,980 --> 00:56:09,340

they showed me a map of the world could

1303

00:56:07,510 --> 00:56:10,540

we drive it around the world before I

1304

00:56:09,340 --> 00:56:13,809

thought about I said yeah we can do that

1305

00:56:10,539 --> 00:56:15,880

so we did we wow we drove it from Geneva

1306

00:56:13,809 --> 00:56:17,769

headed east and basically kept driving

1307

00:56:15,880 --> 00:56:19,180

to pick up back to Jeanette wow so this

1308

00:56:17,769 --> 00:56:21,219

car has been around the world it has

1309

00:56:19,179 --> 00:56:23,619

it's about 28,000 kilometers around

1310

00:56:21,219 --> 00:56:25,839

where we hope you enjoyed this special

1311

00:56:23,619 --> 00:56:28,389

episode of a week in science with guest

1312  
00:56:25,840 --> 00:56:30,850  
host english actor robert Llewellyn to

1313  
00:56:28,389 --> 00:56:36,269  
see the film of robert driving trev go

1314  
00:56:30,849 --> 00:56:36,269  
to our i ate us org a you

1315  
00:56:46,480 --> 00:56:51,500  
thank you for listening to the skeptic

1316  
00:56:49,039 --> 00:56:53,690  
zone and don't forget Simon Singh

1317  
00:56:51,500 --> 00:56:56,300  
visiting Australia speaking here there

1318  
00:56:53,690 --> 00:56:57,619  
and everywhere check the Australian

1319  
00:56:56,300 --> 00:56:59,930  
skeptics website and the Canberra

1320  
00:56:57,619 --> 00:57:02,390  
skeptics websites for details of the

1321  
00:56:59,929 --> 00:57:05,690  
impending visit and talks by dr. Simon

1322  
00:57:02,389 --> 00:57:08,659  
Singh well worth well worth going to see

1323  
00:57:05,690 --> 00:57:10,639  
if you can make it and who knows there

1324  
00:57:08,659 --> 00:57:14,089  
may even be an interview of dr. Simon

1325  
00:57:10,639 --> 00:57:18,608  
Singh soon on the skeptic zone well

1326  
00:57:14,090 --> 00:57:21,890  
that's it I better zip up my suitcase

1327  
00:57:18,608 --> 00:57:24,679  
book that taxi and get ready to leave

1328  
00:57:21,889 --> 00:57:26,629  
back to Australia so for this week at

1329  
00:57:24,679 --> 00:57:28,809  
least this is Richard Saunders signing

1330  
00:57:26,630 --> 00:57:35,329  
off from the San Francisco Bay Area

1331  
00:57:28,809 --> 00:57:40,009  
California you've been listening to the

1332  
00:57:35,329 --> 00:57:43,849  
skeptic zone visit our website at [www](http://www)

1333  
00:57:40,010 --> 00:57:47,560  
skeptics on TV for comments contacts and

1334  
00:57:43,849 --> 00:57:47,559  
extra video reports