

**THE  
SKEPTIC  
ZONE  
PODCAST**

[www.skepticzone.tv](http://www.skepticzone.tv)

1  
00:00:10,790 --> 00:00:02,180  
this is James Randi and you're listening

2  
00:00:13,669 --> 00:00:10,800  
to the skeptic zone welcome to the

3  
00:00:15,530 --> 00:00:13,679  
skeptic zone the podcast from Australia

4  
00:00:17,600 --> 00:00:15,540  
for science and reason

5  
00:00:20,530 --> 00:00:17,610  
[Music]

6  
00:00:25,490 --> 00:00:20,540  
[Applause]

7  
00:00:28,170 --> 00:00:25,500  
[Music]

8  
00:00:32,490 --> 00:00:28,180  
hello and welcome to the skeptic zone

9  
00:00:35,400 --> 00:00:32,500  
episode number 444 for the 23rd of April

10  
00:00:38,190 --> 00:00:35,410  
2017 Richardson is here with you from a

11  
00:00:41,310 --> 00:00:38,200  
bar me Sydney Australia beautiful

12  
00:00:44,160 --> 00:00:41,320  
weather and I don't mind it at all it's

13  
00:00:46,759 --> 00:00:44,170

not cold it's not too hot it's very nice

14

00:00:48,840 --> 00:00:46,769

and lucky it was for this weekend

15

00:00:51,660 --> 00:00:48,850

yesterday here in Sydney we had the

16

00:00:54,509 --> 00:00:51,670

March for science oh happy birthday Lara

17

00:00:57,479 --> 00:00:54,519

by the way we had the March for science

18

00:00:59,630 --> 00:00:57,489

and this is going to make up the bulk of

19

00:01:03,030 --> 00:00:59,640

this week's episode of the skeptic zone

20

00:01:05,640 --> 00:01:03,040

where Maynard was running around with

21

00:01:07,890 --> 00:01:05,650

his microphone as normal as usual and

22

00:01:09,930 --> 00:01:07,900

those people who were there who who came

23

00:01:13,109 --> 00:01:09,940

up actually a lot of people came up and

24

00:01:14,550 --> 00:01:13,119

said hi to me nod and myself listeners

25

00:01:16,770 --> 00:01:14,560

to the skeptics own hello to everybody

26

00:01:19,950 --> 00:01:16,780

who did wow great to see you sorry we

27

00:01:21,270 --> 00:01:19,960

couldn't stop and Chad for very long we

28

00:01:23,609 --> 00:01:21,280

were busy running around getting

29

00:01:25,469 --> 00:01:23,619

interviews and things but thank you

30

00:01:27,750 --> 00:01:25,479

really sincerely thank you for coming up

31

00:01:31,169 --> 00:01:27,760

and saying hi to me not and me what a

32

00:01:33,209 --> 00:01:31,179

March it was a great a great turnout for

33

00:01:36,450 --> 00:01:33,219

science the crowd i think was estimated

34

00:01:38,520 --> 00:01:36,460

between one and a half to two thousand

35

00:01:40,649 --> 00:01:38,530

people turned up in downtown sydney and

36

00:01:42,779 --> 00:01:40,659

you'll be hearing a lot of it about that

37

00:01:44,969 --> 00:01:42,789

coming up on this week's episode of the

38

00:01:49,050 --> 00:01:44,979

skeptic zone but before we get to all of

39

00:01:51,620 --> 00:01:49,060

that i've been very exciting it is to to

40

00:01:54,480 --> 00:01:51,630

kick off the show we're going to have a

41

00:01:56,300 --> 00:01:54,490

statement a report i should say from the

42

00:01:58,980 --> 00:01:56,310

australian skeptics about some new

43

00:02:02,489 --> 00:01:58,990

government action against the australian

44

00:02:04,529 --> 00:02:02,499

vaccination as skeptics network or as

45

00:02:06,859 --> 00:02:04,539

they keep calling themselves anyway the

46

00:02:08,790 --> 00:02:06,869

avn the upstream AXA nation network

47

00:02:12,000 --> 00:02:08,800

longtime listeners are very familiar

48

00:02:14,570 --> 00:02:12,010

with that crew that crowd that group as

49

00:02:17,910 --> 00:02:14,580

we sometimes say that zany wacky

50

00:02:20,100 --> 00:02:17,920

off-the-wall group i didn't see them put

51  
00:02:21,870 --> 00:02:20,110  
a foot into the march for science anyway

52  
00:02:25,199 --> 00:02:21,880  
some news about some more government

53  
00:02:27,960 --> 00:02:25,209  
action of a type and ordered it seems

54  
00:02:30,960 --> 00:02:27,970  
looking into their accounts their

55  
00:02:32,400 --> 00:02:30,970  
business affairs news about that coming

56  
00:02:36,090 --> 00:02:32,410  
up to the top of the show following that

57  
00:02:37,320 --> 00:02:36,100  
its brouhaha from australia science TV

58  
00:02:38,490 --> 00:02:37,330  
hello to

59  
00:02:41,520 --> 00:02:38,500  
dr. Paul Willis and all the wonderful

60  
00:02:43,380 --> 00:02:41,530  
people at the Royal Institution of

61  
00:02:47,580 --> 00:02:43,390  
Australia down there in Adelaide who put

62  
00:02:51,990 --> 00:02:47,590  
brouhaha together this week a new way to

63  
00:02:55,350 --> 00:02:52,000

treat or fight cancer a very unusual way

64

00:02:57,810 --> 00:02:55,360

you'll find out soon and then and then

65

00:03:01,590 --> 00:02:57,820

our big report the Sydney March for

66

00:03:04,080 --> 00:03:01,600

science Maynard was there on the spot in

67

00:03:06,750 --> 00:03:04,090

fact it's a bit of a a continuing story

68

00:03:08,310 --> 00:03:06,760

it's a bit of a saga because a couple of

69

00:03:10,650 --> 00:03:08,320

days before the match for science made

70

00:03:12,240 --> 00:03:10,660

on and I and our friend Lara who you

71

00:03:15,600 --> 00:03:12,250

hear on skip exam from time to time were

72

00:03:17,550 --> 00:03:15,610

strolling along in Sydney downtown

73

00:03:19,500 --> 00:03:17,560

sydney by the harbor and we talked about

74

00:03:21,090 --> 00:03:19,510

the upcoming march for science sort of

75

00:03:22,970 --> 00:03:21,100

getting into the mood getting excited

76

00:03:26,490 --> 00:03:22,980

about it then we're going to have a

77

00:03:27,960 --> 00:03:26,500

another report press release from

78

00:03:29,790 --> 00:03:27,970

Australian skeptics as to why the

79

00:03:31,590 --> 00:03:29,800

Australian skeptics were there how

80

00:03:34,140 --> 00:03:31,600

important it was for the skeptic

81

00:03:36,600 --> 00:03:34,150

community to be there and then back to

82

00:03:39,270 --> 00:03:36,610

the March itself where Maynard manages

83

00:03:41,160 --> 00:03:39,280

to score an interview with dr. Carl dr.

84

00:03:43,920 --> 00:03:41,170

Cole cruising iski in fact there are two

85

00:03:46,020 --> 00:03:43,930

interviews it was great to see dr. Carl

86

00:03:49,229 --> 00:03:46,030

there on the day may not also speaks to

87

00:03:50,759 --> 00:03:49,239

Tim mendham Iran sir give our reporter

88

00:03:52,530 --> 00:03:50,769

and president of the Australian skeptics

89

00:03:55,080 --> 00:03:52,540  
of course Jessica singer or from

90

00:03:58,170 --> 00:03:55,090  
Australian skeptics plus lots of people

91

00:04:00,630 --> 00:03:58,180  
at the March itself you'll hear some of

92

00:04:02,400 --> 00:04:00,640  
the speakers a brief parts of some of

93

00:04:05,040 --> 00:04:02,410  
the speeches being made the importance

94

00:04:08,130 --> 00:04:05,050  
of science we catch up with dr. Mike

95

00:04:09,949 --> 00:04:08,140  
Archer a very important scientist in

96

00:04:12,570 --> 00:04:09,959  
Australia with a long tradition of

97

00:04:14,330 --> 00:04:12,580  
wonderful work also from the skeptics

98

00:04:17,009 --> 00:04:14,340  
it's alycia Dean makes an appearance

99

00:04:20,070 --> 00:04:17,019  
Maynard speaks to Julie McCrossan who

100

00:04:22,770 --> 00:04:20,080  
was the emcee for the day and lots of

101  
00:04:24,210 --> 00:04:22,780  
other people including a skeptic zone

102  
00:04:26,310 --> 00:04:24,220  
listen lots of other people who came up

103  
00:04:29,280 --> 00:04:26,320  
to say hello or were there with

104  
00:04:32,900 --> 00:04:29,290  
interesting signs what a report what a

105  
00:04:37,219 --> 00:04:32,910  
an avalanche of material from Maynard

106  
00:04:40,320 --> 00:04:37,229  
we've made a special 22-minute Maynard

107  
00:04:42,719 --> 00:04:40,330  
report video about the whole day which

108  
00:04:46,170 --> 00:04:42,729  
will put up very soon at Maynard calm

109  
00:04:49,380 --> 00:04:46,180  
today you or at least on the Facebook

110  
00:04:51,150 --> 00:04:49,390  
page we'll let you know as soon as we do

111  
00:04:53,940 --> 00:04:51,160  
follow the tweets you'll find out

112  
00:04:56,240 --> 00:04:53,950  
and you can see may not live in action

113  
00:05:01,020 --> 00:04:56,250

as it were running around doing reports

114

00:05:02,640 --> 00:05:01,030

for the March for science then to round

115

00:05:05,280 --> 00:05:02,650

off the show we're going to flip all the

116

00:05:08,130 --> 00:05:05,290

way over to the United States where dr.

117

00:05:10,590 --> 00:05:08,140

Angie matki and Celeste ward two

118

00:05:12,120 --> 00:05:10,600

wonderful skeptics dr. Angie has been on

119

00:05:14,880 --> 00:05:12,130

the skeptic zone before I think Celeste

120

00:05:17,340 --> 00:05:14,890

has to Celeste is the wonderful artist

121

00:05:19,550 --> 00:05:17,350

caricaturist my goodness me I'll put a

122

00:05:22,380 --> 00:05:19,560

link in the show notes to her site she

123

00:05:25,830 --> 00:05:22,390

did the business cards that may not and

124

00:05:29,880 --> 00:05:25,840

I use of these wonderful caricatures of

125

00:05:33,510 --> 00:05:29,890

us and sometimes you see a piece of

126  
00:05:35,670 --> 00:05:33,520  
artwork and you know there's something

127  
00:05:38,430 --> 00:05:35,680  
very special with the artist I've got

128  
00:05:42,060 --> 00:05:38,440  
that extra something we've Celeste she's

129  
00:05:44,430 --> 00:05:42,070  
got this amazing way to bring out your

130  
00:05:45,420 --> 00:05:44,440  
true character in her caricatures that

131  
00:05:47,970 --> 00:05:45,430  
they're quite something I'm very

132  
00:05:49,680 --> 00:05:47,980  
impressed anyway they were at the march

133  
00:05:52,350 --> 00:05:49,690  
in washington the march for science and

134  
00:05:54,720 --> 00:05:52,360  
they give us an on-the-spot report from

135  
00:05:56,930 --> 00:05:54,730  
that march and then they discuss it a

136  
00:06:01,560 --> 00:05:56,940  
bit later on in their hotel room and

137  
00:06:05,190 --> 00:06:01,570  
have pizzas oh yes yes it's good fun

138  
00:06:07,470 --> 00:06:05,200

being a skeptic sure hope I'm even worn

139

00:06:08,909 --> 00:06:07,480

out reading all that stuff coming up on

140

00:06:11,790 --> 00:06:08,919

this week's episode I better run

141

00:06:13,950 --> 00:06:11,800

downstairs very quickly and have some

142

00:06:17,900 --> 00:06:13,960

pizza of my own and what's my favorite

143

00:06:21,450 --> 00:06:17,910

pizza mexicana anything of chillies and

144

00:06:24,060 --> 00:06:21,460

things like that oh yeah why not well I

145

00:06:25,550 --> 00:06:24,070

do that I hope you enjoy the skeptic

146

00:06:46,540 --> 00:06:25,560

zone

147

00:06:54,740 --> 00:06:49,310

Romilly website of Australian skeptics

148

00:06:58,460 --> 00:06:54,750

ww skeptics com au anti-vaxxers ordered

149

00:07:01,910 --> 00:06:58,470

to please explain fundraising published

150

00:07:05,480 --> 00:07:01,920

on the sixteenth of April 2017 written

151  
00:07:08,720 --> 00:07:05,490  
by Tim when the New South Wales

152  
00:07:11,780 --> 00:07:08,730  
Government has served papers on the

153  
00:07:14,780 --> 00:07:11,790  
Australian anti-vaccination skeptics

154  
00:07:17,740 --> 00:07:14,790  
network as one step in the government's

155  
00:07:21,170 --> 00:07:17,750  
inquiry into its fund raising activities

156  
00:07:24,950 --> 00:07:21,180  
according to a story by Linda similis in

157  
00:07:27,830 --> 00:07:24,960  
the Sydney Daily Telegraph innovation

158  
00:07:30,620 --> 00:07:27,840  
and better regulation Minister Matt Ian

159  
00:07:33,290 --> 00:07:30,630  
has ordered the inquiry following

160  
00:07:36,160 --> 00:07:33,300  
complaints it may have been seeking

161  
00:07:39,880 --> 00:07:36,170  
donations from the public illegally

162  
00:07:42,920 --> 00:07:39,890  
under the charitable fund raising act

163  
00:07:45,350 --> 00:07:42,930

1991 individuals or groups seeking

164

00:07:49,310 --> 00:07:45,360

donations from the public for charitable

165

00:07:52,760 --> 00:07:49,320

purposes may require an authority to

166

00:07:55,670 --> 00:07:52,770

raise funds something the Avs n does not

167

00:07:57,650 --> 00:07:55,680

have this follows a statement in the New

168

00:08:00,200 --> 00:07:57,660

South Wales Parliament at the end of

169

00:08:02,870 --> 00:08:00,210

last year by then better regulation

170

00:08:05,270 --> 00:08:02,880

Minister Victor Dominello that fair

171

00:08:08,660 --> 00:08:05,280

trading authorities would investigate

172

00:08:10,910 --> 00:08:08,670

the AVS in following the group's calling

173

00:08:13,820 --> 00:08:10,920

off of its high court attempt to

174

00:08:18,680 --> 00:08:13,830

overturn the federal government's no jab

175

00:08:20,900 --> 00:08:18,690

no pay policy late on Christmas Day the

176

00:08:24,140 --> 00:08:20,910

organization said that it had been

177

00:08:27,050 --> 00:08:24,150

advised by legal counsel that there was

178

00:08:32,060 --> 00:08:27,060

a quote poor chance of success and quote

179

00:08:35,540 --> 00:08:32,070

despite raising 152 thousand dollars to

180

00:08:39,440 --> 00:08:35,550

pay costs that figure was contradicted

181

00:08:42,110 --> 00:08:39,450

by the Avs n president Tasha David in

182

00:08:45,579 --> 00:08:42,120

October who said it had raised quote

183

00:08:49,069 --> 00:08:45,589

just over 160 thousand dollars

184

00:08:51,619 --> 00:08:49,079

AVS n said it had spent seventy two

185

00:08:53,689 --> 00:08:51,629

thousand five hundred dollars on legal

186

00:08:55,790 --> 00:08:53,699

advice a figure which has been

187

00:08:59,660 --> 00:08:55,800

questioned by members within the network

188

00:09:01,129 --> 00:08:59,670

as well as many outside of it when

189

00:09:05,480 --> 00:09:01,139

announcing the end of its high court

190

00:09:08,030 --> 00:09:05,490

campaign the AVS n suggested that the

191

00:09:10,670 --> 00:09:08,040

remaining funds would be put into use

192

00:09:13,759 --> 00:09:10,680

such as pursuing the Therapeutic Goods

193

00:09:15,740 --> 00:09:13,769

Administration for quote misfeasance in

194

00:09:17,720 --> 00:09:15,750

public office and quote or lobbying

195

00:09:19,999 --> 00:09:17,730

members of parliament for a Royal

196

00:09:22,460 --> 00:09:20,009

Commission into vaccination it was also

197

00:09:25,280 --> 00:09:22,470

suggested the donations could be used to

198

00:09:27,980 --> 00:09:25,290

bring quote top international experts

199

00:09:30,949 --> 00:09:27,990

unquote to Australia or to purchase

200

00:09:33,350 --> 00:09:30,959

advertising the network is now obliged

201  
00:09:36,679 --> 00:09:33,360  
to explain how the money was actually

202  
00:09:41,059 --> 00:09:36,689  
spent the recent papers were served on a

203  
00:09:45,199 --> 00:09:41,069  
v SN representative naturopath brett

204  
00:09:47,119 --> 00:09:45,209  
Smith now listeners who have been with

205  
00:09:50,139 --> 00:09:47,129  
the skeptic zone for many years may well

206  
00:09:52,549 --> 00:09:50,149  
remember that well I guess for the first

207  
00:09:54,410 --> 00:09:52,559  
four or five years of the show we had a

208  
00:09:56,749 --> 00:09:54,420  
segment called the think tank in fact

209  
00:09:59,210 --> 00:09:56,759  
that's never been retired now we could

210  
00:10:01,670 --> 00:09:59,220  
have one anytime I have one soon why not

211  
00:10:03,470 --> 00:10:01,680  
where her group of us would gather at

212  
00:10:05,809 --> 00:10:03,480  
the club at the end of the street it's a

213  
00:10:09,559 --> 00:10:05,819

it's a club that happens to be near and

214

00:10:11,720 --> 00:10:09,569

these studios and over dinner usually a

215

00:10:13,400 --> 00:10:11,730

nice Chinese dinner discuss skeptical

216

00:10:16,490 --> 00:10:13,410

matters of the day and many of those

217

00:10:18,410 --> 00:10:16,500

sessions were based around the

218

00:10:20,540 --> 00:10:18,420

activities of the Australian vaccination

219

00:10:24,009 --> 00:10:20,550

network or the Australian vaccination

220

00:10:27,559 --> 00:10:24,019

skeptics network as they became and the

221

00:10:30,199 --> 00:10:27,569

goings-on of Merrill durian and so on so

222

00:10:32,269 --> 00:10:30,209

I guess this whole saga of the

223

00:10:34,910 --> 00:10:32,279

anti-vaccination movement has been with

224

00:10:36,650 --> 00:10:34,920

the skeptic zone from day one and I

225

00:10:39,559 --> 00:10:36,660

guess in a bad sort of way this is an

226

00:10:44,090 --> 00:10:39,569

evergreen story it's not going to go

227

00:10:48,460 --> 00:10:44,100

away but I guess it also brings home to

228

00:10:50,900 --> 00:10:48,470

us again very strongly how important

229

00:10:54,710 --> 00:10:50,910

regulation and lore is when we're

230

00:10:57,230 --> 00:10:54,720

fighting all this sort of bad science to

231

00:10:58,820 --> 00:10:57,240

the extent where people do things

232

00:11:00,650 --> 00:10:58,830

illegally

233

00:11:02,630 --> 00:11:00,660

and that is yet to be seen in this

234

00:11:04,250 --> 00:11:02,640

situation that it's the government

235

00:11:08,840 --> 00:11:04,260

authorities who are the right people to

236

00:11:11,450 --> 00:11:08,850

step in and make real changes doesn't

237

00:11:13,940 --> 00:11:11,460

absolve us from continuing our campaigns

238

00:11:16,430 --> 00:11:13,950

and investigations and pressure but at

239

00:11:18,950 --> 00:11:16,440

the end of the day it's the it's the

240

00:11:21,230 --> 00:11:18,960

government the government its especially

241

00:11:23,570 --> 00:11:21,240

when things like the power balance from

242

00:11:26,140 --> 00:11:23,580

years ago the power balance wristband

243

00:11:28,250 --> 00:11:26,150

came in it was government regulation and

244

00:11:29,930 --> 00:11:28,260

instruction that made them put up

245

00:11:32,750 --> 00:11:29,940

retraction notices here in Australia

246

00:11:34,520 --> 00:11:32,760

when the product didn't work and that

247

00:11:37,460 --> 00:11:34,530

led eventually to the downfall of the

248

00:11:42,150 --> 00:11:37,470

company so an important lesson and an

249

00:11:46,540 --> 00:11:45,170

[Music]

250

00:11:54,700 --> 00:11:46,550

Oh

251  
00:11:58,580 --> 00:11:54,710  
[Music]

252  
00:12:01,040 --> 00:11:58,590  
and now direct from the cafe at

253  
00:12:08,030 --> 00:12:01,050  
Australia's Science Channel it's

254  
00:12:09,530 --> 00:12:08,040  
brouhaha with Casey Harrigan I wouldn't

255  
00:12:12,170 --> 00:12:09,540  
normally laugh at a potential cancer

256  
00:12:14,540 --> 00:12:12,180  
treatment but this one involves sperm

257  
00:12:16,730 --> 00:12:14,550  
wearing tiny little harnesses to deliver

258  
00:12:19,370 --> 00:12:16,740  
drugs directly to gain illogical cancer

259  
00:12:21,320 --> 00:12:19,380  
and that's really funny but being

260  
00:12:24,290 --> 00:12:21,330  
hilarious doesn't make this research any

261  
00:12:26,450 --> 00:12:24,300  
less incredible research is soaked a

262  
00:12:29,270 --> 00:12:26,460  
bovine sperm cell in a chemotherapy drug

263  
00:12:31,490 --> 00:12:29,280

then fitted it with a 3d printed harness

264

00:12:33,350 --> 00:12:31,500

coated with iron this allowed the

265

00:12:35,750 --> 00:12:33,360

researchers to guide the tiny drug

266

00:12:37,490 --> 00:12:35,760

smugglers across a petri dish using a

267

00:12:39,650 --> 00:12:37,500

magnet at about half the speed they

268

00:12:41,570 --> 00:12:39,660

would normally swim when the sperm

269

00:12:43,640 --> 00:12:41,580

reached its target the harnesses design

270

00:12:45,350 --> 00:12:43,650

allows it to bend out of the way so the

271

00:12:47,840 --> 00:12:45,360

stem could deliver the drugs into the

272

00:12:49,400 --> 00:12:47,850

cancer cell no more cancer and normal

273

00:12:51,890 --> 00:12:49,410

complications from sending the drug

274

00:12:53,690 --> 00:12:51,900

through the person's bloodstream it'll

275

00:12:56,090 --> 00:12:53,700

take years more research to make these

276

00:12:58,790 --> 00:12:56,100

cancer fighting life savings superhero

277

00:13:00,680 --> 00:12:58,800

sperm a reality but cervical cancer

278

00:13:03,380 --> 00:13:00,690

kills hundreds of thousands of women

279

00:13:05,210 --> 00:13:03,390

across the world every year so who cares

280

00:13:07,280 --> 00:13:05,220

how unconventional de streamin seems

281

00:13:10,140 --> 00:13:07,290

laughter might really be the best

282

00:13:24,450 --> 00:13:13,260

for more brouhaha and Australian science

283

00:13:26,790 --> 00:13:24,460

head for ww Australia science TV it

284

00:13:28,440 --> 00:13:26,800

crashbug a Budweiser a skeptic wish to

285

00:13:30,560 --> 00:13:28,450

shock a desolate it's a skeptic we

286

00:13:33,240 --> 00:13:30,570

service at a gallop icona channel Annika

287

00:13:35,190 --> 00:13:33,250

meet the skeptics on podcast target or

288

00:13:37,050 --> 00:13:35,200

vision heritage from Tosh metropolis add

289

00:13:39,150 --> 00:13:37,060

to the manual Travie language she

290

00:13:41,880 --> 00:13:39,160

touched a critical Gondor crashed ashore

291

00:13:43,440 --> 00:13:41,890

not need seven a I said nearly

292

00:13:45,450 --> 00:13:43,450

is 20 and then he can shake member

293

00:13:47,940 --> 00:13:45,460

travelin coca-cola thought of David upon

294

00:13:50,280 --> 00:13:47,950

skeptical starter shaft 12 or just info

295

00:13:51,360 --> 00:13:50,290

at skeptic wishbone Hootie man to bad

296

00:13:54,270 --> 00:13:51,370

boy island figure i made the facebook

297

00:13:56,790 --> 00:13:54,280

laudanum cottage amita facebook.com /

298

00:14:00,350 --> 00:13:56,800

skeptical tasha shakti mandalas volume

299

00:14:03,660 --> 00:14:00,360

into our insulated dharamdas vania Incan

300

00:14:05,430 --> 00:14:03,670

hi this is garba raas co-president of

301  
00:14:07,140 --> 00:14:05,440  
the Hungarian skeptics society and

302  
00:14:09,930 --> 00:14:07,150  
chairman of the European Council of

303  
00:14:12,240 --> 00:14:09,940  
skeptical organizations a solicitor of

304  
00:14:14,220 --> 00:14:12,250  
the skeptic zone you probably agree that

305  
00:14:16,110 --> 00:14:14,230  
educating others about to the science

306  
00:14:18,930 --> 00:14:16,120  
and critical thinking is an important

307  
00:14:20,670 --> 00:14:18,940  
task if you are eager to take part in

308  
00:14:23,070 --> 00:14:20,680  
either of these activities we would be

309  
00:14:28,440 --> 00:14:23,080  
happy to hear from you don't hesitate to

310  
00:14:31,380 --> 00:14:28,450  
contact us at [www.adr.org](http://www.adr.org) info at

311  
00:14:33,330 --> 00:14:31,390  
skeptical hu they also recommend you

312  
00:14:35,970 --> 00:14:33,340  
visiting our Facebook page skeptic wish

313  
00:14:40,090 --> 00:14:35,980

tasha shack or simply come and join us

314

00:14:40,100 --> 00:14:46,569

[Music]

315

00:14:54,640 --> 00:14:51,739

here's my not spooky action at the

316

00:14:59,220 --> 00:14:56,210

[Music]

317

00:15:00,809 --> 00:14:59,230

hello skeptic zone listeners we've had a

318

00:15:02,430 --> 00:15:00,819

very unusual players a place you

319

00:15:05,009 --> 00:15:02,440

wouldn't normally find us throughout the

320

00:15:07,499 --> 00:15:05,019

front of the Star City casino in Sydney

321

00:15:10,559 --> 00:15:07,509

just on Walsh Bay and we were walking

322

00:15:11,960 --> 00:15:10,569

along towards the city now there's

323

00:15:14,790 --> 00:15:11,970

nothing particularly skeptical or

324

00:15:17,579 --> 00:15:14,800

scientific around us but looking around

325

00:15:20,430 --> 00:15:17,589

me I can see people that weren't good at

326

00:15:23,129 --> 00:15:20,440

stats leaving the casino looking at not

327

00:15:24,930 --> 00:15:23,139

too happy about things and I can see bit

328

00:15:26,610 --> 00:15:24,940

of botany around the place where they've

329

00:15:28,259 --> 00:15:26,620

been growing some flowers to make people

330

00:15:29,519 --> 00:15:28,269

you know feel a bit better when they

331

00:15:33,199 --> 00:15:29,529

come out with a casino after not doing

332

00:15:35,699 --> 00:15:33,209

so well with the odds and statistics etc

333

00:15:37,019 --> 00:15:35,709

Richard's are wandering along la rosiere

334

00:15:39,329 --> 00:15:37,029

to the having a chat about something

335

00:15:41,309 --> 00:15:39,339

skeptical no doubt and in the distance

336

00:15:43,319 --> 00:15:41,319

there's all the new buildings have been

337

00:15:46,050 --> 00:15:43,329

put up around Bank bamboo banga room

338

00:15:48,689 --> 00:15:46,060

which is a part of Sydney that ever done

339

00:15:50,069 --> 00:15:48,699

up and it's a bit of an overcast day and

340

00:15:51,749 --> 00:15:50,079

I know that the listeners to the skeptic

341

00:15:54,150 --> 00:15:51,759

zone a big on the weather report so i

342

00:15:58,309 --> 00:15:54,160

think the humidity would be man average

343

00:16:00,840 --> 00:15:58,319

and it's a nice little about 18 degrees

344

00:16:02,009 --> 00:16:00,850

there's lots of private yachts going

345

00:16:04,499 --> 00:16:02,019

away in the distance and i'm just

346

00:16:06,870 --> 00:16:04,509

looking at them all there and as I look

347

00:16:08,699 --> 00:16:06,880

along the 15 or 16 private yachts I can

348

00:16:10,170 --> 00:16:08,709

see that none of them are owned by

349

00:16:13,850 --> 00:16:10,180

Richard Saunders but you never know

350

00:16:16,139 --> 00:16:13,860

maybe the 17th or 18th one might be his

351  
00:16:17,819 --> 00:16:16,149  
and we're just here at to fund the

352  
00:16:19,439 --> 00:16:17,829  
Maritime Museum at the moment and

353  
00:16:21,629 --> 00:16:19,449  
Richard Saunders has just spotted

354  
00:16:24,509 --> 00:16:21,639  
something he's never seen before they've

355  
00:16:26,550 --> 00:16:24,519  
got the HMS onslow over there the the

356  
00:16:28,559 --> 00:16:26,560  
submarine well I know that but I haven't

357  
00:16:32,069 --> 00:16:28,569  
been down here for a while and there's a

358  
00:16:33,660 --> 00:16:32,079  
massive big new building just behind the

359  
00:16:35,429 --> 00:16:33,670  
submarine I'm not sure that's all right

360  
00:16:36,990 --> 00:16:35,439  
it must be the net the museum now of

361  
00:16:39,509 --> 00:16:37,000  
course that many people will realize the

362  
00:16:42,809 --> 00:16:39,519  
the the onslow is the submarine that was

363  
00:16:44,400 --> 00:16:42,819

used in the Batman movie 1966 when you

364

00:16:46,559 --> 00:16:44,410

see penguin and Joker in the submarine

365

00:16:47,850 --> 00:16:46,569

it is the submarine used on pretty sure

366

00:16:50,550 --> 00:16:47,860

oh well I could be wrong about that

367

00:16:52,019 --> 00:16:50,560

maybe I was just I was just making some

368

00:16:54,360 --> 00:16:52,029

facts up just off the top my head there

369

00:16:56,069 --> 00:16:54,370

at the altar I'm pretty sure but I'm

370

00:16:58,259 --> 00:16:56,079

pretty sure that's what it was I mean

371

00:17:00,150 --> 00:16:58,269

you know and look I mean who really we

372

00:17:02,910 --> 00:17:00,160

know and when do when Julie Newmar says

373

00:17:04,230 --> 00:17:02,920

down periscope you don't argue you don't

374

00:17:06,569 --> 00:17:04,240

know you with Catwoman that's

375

00:17:08,730 --> 00:17:06,579

as Lee Meriwether but still posing and

376

00:17:10,079 --> 00:17:08,740

they will marry whether you see Richard

377

00:17:12,150 --> 00:17:10,089

and I just wander around the famous

378

00:17:15,630 --> 00:17:12,160

landmarks of Sydney discussing sixties

379

00:17:17,189 --> 00:17:15,640

movies we're actually we were here with

380

00:17:19,350 --> 00:17:17,199

Lara Bannerman we're all going to be

381

00:17:20,699 --> 00:17:19,360

doing the March for science tomorrow and

382

00:17:23,669 --> 00:17:20,709

so we're just getting bit of practice in

383

00:17:24,780 --> 00:17:23,679

now practice yeah so I'm got an outfit

384

00:17:26,730 --> 00:17:24,790

you're gonna wear a few people are going

385

00:17:27,929 --> 00:17:26,740

in lab coats I was considering a lab

386

00:17:29,400 --> 00:17:27,939

coat I've got a couple of science ii

387

00:17:31,710 --> 00:17:29,410

t-shirts and definitely some science ii

388

00:17:34,169 --> 00:17:31,720

jewelry oh what a science jewelry i like

389

00:17:38,130 --> 00:17:34,179

DNA helix and stuff um I've got some

390

00:17:41,790 --> 00:17:38,140

rockets I've got some planets earrings

391

00:17:42,990 --> 00:17:41,800

and an atom brooch I've got quite a few

392

00:17:44,730 --> 00:17:43,000

things actually I can't possibly fit

393

00:17:46,049 --> 00:17:44,740

them all on because I was thinking if

394

00:17:47,549 --> 00:17:46,059

anyone asks me I should be I should be

395

00:17:49,020 --> 00:17:47,559

representing a branch of science and I

396

00:17:50,760 --> 00:17:49,030

was gonna go with geology but I wanted

397

00:17:52,680 --> 00:17:50,770

something I know it's exciting but I

398

00:17:53,700 --> 00:17:52,690

wonder something more like phrenology or

399

00:17:56,190 --> 00:17:53,710

something but I don't think that's an

400

00:17:58,020 --> 00:17:56,200

actual science not exactly it's a

401  
00:18:00,840 --> 00:17:58,030  
pseudoscience it's a study of bumps on

402  
00:18:02,640 --> 00:18:00,850  
the head Richard apology run boy run

403  
00:18:03,720 --> 00:18:02,650  
apology i might get down with that one

404  
00:18:05,100 --> 00:18:03,730  
like to think about that as we wander

405  
00:18:07,140 --> 00:18:05,110  
around darling harbour here and we check

406  
00:18:13,710 --> 00:18:07,150  
out the submarine that was actually used

407  
00:18:15,120 --> 00:18:13,720  
in the 1966 batman movie this article

408  
00:18:18,200 --> 00:18:15,130  
appeared on the australian skeptics

409  
00:18:20,910 --> 00:18:18,210  
website on april the 18th by Tim Mendham

410  
00:18:23,310 --> 00:18:20,920  
Australian skeptics Inc why we're

411  
00:18:25,020 --> 00:18:23,320  
marching for science members of the

412  
00:18:27,180 --> 00:18:25,030  
committee of Australian skeptic zinc

413  
00:18:29,610 --> 00:18:27,190

will join the march for science in

414

00:18:31,470 --> 00:18:29,620

Sydney on April the 22nd and those

415

00:18:33,480 --> 00:18:31,480

skeptics who are thinking of taking part

416

00:18:35,880 --> 00:18:33,490

might consider joining us we're even

417

00:18:37,380 --> 00:18:35,890

offering very very cheap t-shirts so you

418

00:18:40,830 --> 00:18:37,390

can proudly declare both you're

419

00:18:42,660 --> 00:18:40,840

skeptical and pro-science attitude the

420

00:18:45,570 --> 00:18:42,670

march for science who has initially

421

00:18:48,180 --> 00:18:45,580

established in the US where there is a

422

00:18:51,180 --> 00:18:48,190

considerable and growing anti-science

423

00:18:54,030 --> 00:18:51,190

movement such as the concerning advance

424

00:18:56,220 --> 00:18:54,040

of the anti-vaccination movement the

425

00:18:58,950 --> 00:18:56,230

march for science movement has now

426

00:19:02,160 --> 00:18:58,960

spread around the world with much as

427

00:19:04,680 --> 00:19:02,170

being held on April 22nd birthday to

428

00:19:06,900 --> 00:19:04,690

quote bring people from all walks of

429

00:19:09,330 --> 00:19:06,910

life who believe we need more evidence

430

00:19:12,510 --> 00:19:09,340

and reason in our political process in

431

00:19:14,760 --> 00:19:12,520

quote most Australian capital cities and

432

00:19:17,470 --> 00:19:14,770

some regional centers will be taking

433

00:19:20,409 --> 00:19:17,480

part Australia has had its

434

00:19:22,720 --> 00:19:20,419

sheriff pseudoscience movements from the

435

00:19:25,210 --> 00:19:22,730

creation movement of the 1980s to the

436

00:19:29,200 --> 00:19:25,220

popularity of today's self-appointed

437

00:19:31,930 --> 00:19:29,210

nutrition expert paleo Pete Evans from

438

00:19:34,000 --> 00:19:31,940

the disgraced fake cancer sufferer Bill

439

00:19:37,360 --> 00:19:34,010

Gibson to the anti-vaccination movement

440

00:19:40,330 --> 00:19:37,370

there have been many worrying challenges

441

00:19:42,730 --> 00:19:40,340

for skeptics and these have real impact

442

00:19:45,490 --> 00:19:42,740

the anti-vaccination movement has

443

00:19:48,880 --> 00:19:45,500

created a misguided environment of fear

444

00:19:51,970 --> 00:19:48,890

and mistrust that has recently resulted

445

00:19:54,940 --> 00:19:51,980

in a case of tetanus in an unvaccinated

446

00:19:57,640 --> 00:19:54,950

child in the Northern Rivers region and

447

00:20:00,400 --> 00:19:57,650

a brain hemorrhage in a newborn with a

448

00:20:02,620 --> 00:20:00,410

vitamin K deficiency meanwhile

449

00:20:05,320 --> 00:20:02,630

politicians like one nations Malcolm

450

00:20:08,530 --> 00:20:05,330

Roberts publicly deny science consensus

451  
00:20:10,840 --> 00:20:08,540  
on climate change quote science and

452  
00:20:13,030 --> 00:20:10,850  
critical thinking have always been the

453  
00:20:15,070 --> 00:20:13,040  
core and the heart of the skeptical

454  
00:20:17,700 --> 00:20:15,080  
movement in quote says Iran sir give

455  
00:20:21,370 --> 00:20:17,710  
president of Australian sceptic sink or

456  
00:20:24,370 --> 00:20:21,380  
ASI quote the opening sentence of our

457  
00:20:27,419 --> 00:20:24,380  
mission statement is Australian skeptics

458  
00:20:31,390 --> 00:20:27,429  
Inc will advocate critical thinking and

459  
00:20:33,820 --> 00:20:31,400  
scientific reasoning so we believe it is

460  
00:20:35,919 --> 00:20:33,830  
important to stand up and support any

461  
00:20:39,640 --> 00:20:35,929  
move that stresses the importance of

462  
00:20:43,360 --> 00:20:39,650  
Sciences place in society and public and

463  
00:20:45,159 --> 00:20:43,370

private policy end quote Tim mendham

464

00:20:47,169 --> 00:20:45,169  
executive officer for Australian

465

00:20:49,419 --> 00:20:47,179  
skeptics Inc says quote we need to

466

00:20:51,340 --> 00:20:49,429  
ensure that science is properly funded

467

00:20:53,890 --> 00:20:51,350  
that critical thinking is applied to

468

00:20:56,680 --> 00:20:53,900  
decision-making at all levels especially

469

00:20:59,020 --> 00:20:56,690  
in government and that science is

470

00:21:02,680 --> 00:20:59,030  
central to the education of our children

471

00:21:05,110 --> 00:21:02,690  
in quote the principles and goals of

472

00:21:07,870 --> 00:21:05,120  
March for science also include improving

473

00:21:10,090 --> 00:21:07,880  
diversity and inclusion in science

474

00:21:12,190 --> 00:21:10,100  
increasing federal funding for science

475

00:21:14,260 --> 00:21:12,200  
research and supporting individual

476

00:21:18,010 --> 00:21:14,270

scientists and their ability to

477

00:21:21,370 --> 00:21:18,020

communicate their findings freely so

478

00:21:23,440 --> 00:21:21,380

give affirms that these are goals that

479

00:21:25,810 --> 00:21:23,450

The Skeptical movement in Australia have

480

00:21:28,810 --> 00:21:25,820

been pursuing for close to 40 years

481

00:21:31,210 --> 00:21:28,820

quote it's something we are proud of and

482

00:21:33,880 --> 00:21:31,220

happy to continue to

483

00:21:37,290 --> 00:21:33,890

take as long as it is necessary and it

484

00:21:42,450 --> 00:21:37,300

is more than necessary today end quote

485

00:21:46,090 --> 00:21:44,620

it's all about science here today that's

486

00:21:47,680 --> 00:21:46,100

right scientists sexy science is

487

00:21:49,120 --> 00:21:47,690

exciting and today science is marching

488

00:21:50,529 --> 00:21:49,130

while standing around listening to some

489

00:21:51,850 --> 00:21:50,539

lectures and things but that will be

490

00:21:55,149 --> 00:21:51,860

going on down here in Martin play see

491

00:21:56,980 --> 00:21:55,159

I'm here with the inventor of bacon they

492

00:21:58,299 --> 00:21:56,990

put a statue up to him a fantastic thing

493

00:22:00,100 --> 00:21:58,309

going we're going to go out and see why

494

00:22:01,480 --> 00:22:00,110

science needs supporting whose science

495

00:22:02,649 --> 00:22:01,490

needs supporting and how many people are

496

00:22:05,860 --> 00:22:02,659

supporting science and they're just over

497

00:22:07,210 --> 00:22:05,870

there let's go look yes it's an exciting

498

00:22:08,440 --> 00:22:07,220

day to day here in Martin place 50

499

00:22:10,360 --> 00:22:08,450

people march for all sorts of reasons

500

00:22:12,430 --> 00:22:10,370

sometimes people live in March for pigs

501  
00:22:13,840 --> 00:22:12,440  
people march for causes people march for

502  
00:22:15,760 --> 00:22:13,850  
lying down people march for sex but

503  
00:22:17,980 --> 00:22:15,770  
today they are marching for science and

504  
00:22:19,840 --> 00:22:17,990  
dr. Cole is a man who is dedicated his

505  
00:22:22,149 --> 00:22:19,850  
life to science how a man pretty good I

506  
00:22:24,399 --> 00:22:22,159  
tell you what what do you hope can be

507  
00:22:25,899 --> 00:22:24,409  
achieved today and why are people

508  
00:22:28,270 --> 00:22:25,909  
standing up for science today here in

509  
00:22:30,010 --> 00:22:28,280  
Australia what can be achieved the

510  
00:22:32,260 --> 00:22:30,020  
realization that science is good for

511  
00:22:35,320 --> 00:22:32,270  
humans and other living things and it's

512  
00:22:37,480 --> 00:22:35,330  
secondly that if it all finishes today

513  
00:22:39,730 --> 00:22:37,490

then we've failed it's got to keep on

514

00:22:44,250 --> 00:22:39,740

going and we want to give a long term

515

00:22:47,710 --> 00:22:44,260

acceptance that science is a long term

516

00:22:49,149 --> 00:22:47,720

endeavor and so cutting back with

517

00:22:51,970 --> 00:22:49,159

funding today doesn't really change

518

00:22:54,760 --> 00:22:51,980

anything except suddenly in three years

519

00:22:57,070 --> 00:22:54,770

from now 20 20 the medical advances that

520

00:22:58,960 --> 00:22:57,080

would have come through don't the

521

00:23:00,010 --> 00:22:58,970

technological advances don't and because

522

00:23:02,440 --> 00:23:00,020

you haven't got them you don't see what

523

00:23:04,090 --> 00:23:02,450

you haven't got so that's part of what

524

00:23:05,950 --> 00:23:04,100

we're gonna get across that science

525

00:23:07,810 --> 00:23:05,960

needs consistent funding and they're

526

00:23:09,700 --> 00:23:07,820

overwhelmingly size can be good for

527

00:23:11,020 --> 00:23:09,710

humans and other living things what do

528

00:23:14,110 --> 00:23:11,030

you think we're sort of on the edge of

529

00:23:17,350 --> 00:23:14,120

that we may lose discovery wise oh my

530

00:23:20,250 --> 00:23:17,360

god there's so many things I was reading

531

00:23:24,880 --> 00:23:20,260

a paper about how looking at the really

532

00:23:27,909 --> 00:23:24,890

pure science theoretical papers under

533

00:23:29,440 --> 00:23:27,919

the sponsorship of the NIH and American

534

00:23:31,299 --> 00:23:29,450

National Institute of Health and we're

535

00:23:33,279 --> 00:23:31,309

looking at ones that have got not

536

00:23:35,680 --> 00:23:33,289

anything specifically related to

537

00:23:37,180 --> 00:23:35,690

diabetes so it's health but it's not

538

00:23:39,750 --> 00:23:37,190

there's nothing to the human conditions

539

00:23:42,000 --> 00:23:39,760

just looking at pure health science

540

00:23:44,550 --> 00:23:42,010

within 10 years

541

00:23:47,580 --> 00:23:44,560

thirty percent of them a hook to a

542

00:23:49,110 --> 00:23:47,590

patent okay so you're not going to get

543

00:23:51,180 --> 00:23:49,120

the money you're not going to this is

544

00:23:53,070 --> 00:23:51,190

your written a paper on sodium channels

545

00:23:55,200 --> 00:23:53,080

you're not going to get a patent today

546

00:23:56,700 --> 00:23:55,210

but in ten years they'll be patent and

547

00:23:58,800 --> 00:23:56,710

five years of that it'll be helping

548

00:24:00,660 --> 00:23:58,810

people's lives so that's a realization

549

00:24:03,350 --> 00:24:00,670

we want to get across that science can

550

00:24:06,330 --> 00:24:03,360

do stuff for you and that it does and

551

00:24:07,530 --> 00:24:06,340

it's worth while keeping going look at

552

00:24:09,210 --> 00:24:07,540

there's a political issue where

553

00:24:10,770 --> 00:24:09,220

politicians think they can save a bit of

554

00:24:12,660 --> 00:24:10,780

money with it but there's also the

555

00:24:14,040 --> 00:24:12,670

person in the street science gets a bad

556

00:24:15,600 --> 00:24:14,050

rap because of them sometimes the

557

00:24:17,670 --> 00:24:15,610

behavior of Big Pharma do you think it's

558

00:24:21,960 --> 00:24:17,680

important to separate the marketing from

559

00:24:25,070 --> 00:24:21,970

the science sometimes yes and the

560

00:24:28,650 --> 00:24:25,080

comment of Ben Goldacre springs to mind

561

00:24:31,080 --> 00:24:28,660

who you know who's who his mother was no

562

00:24:32,790 --> 00:24:31,090

you have been dug gold okay yes yes they

563

00:24:35,940 --> 00:24:32,800

broke you about the book bad science yes

564

00:24:37,680 --> 00:24:35,950

single bed yet out she was newsha Fox

565

00:24:40,890 --> 00:24:37,690

yeah she is still news the Fox that's

566

00:24:43,500 --> 00:24:40,900

his mom Leslie anyway so he said that

567

00:24:46,550 --> 00:24:43,510

there's not a huge difference between

568

00:24:50,250 --> 00:24:46,560

Big Pharma and big alternative medicine

569

00:24:52,560 --> 00:24:50,260

except in the budgets both of them will

570

00:24:55,260 --> 00:24:52,570

use this fine thing called science in

571

00:24:57,330 --> 00:24:55,270

dodgy ways to make themselves wealthier

572

00:24:59,490 --> 00:24:57,340

so though if they get any hint of a good

573

00:25:00,960 --> 00:24:59,500

result push it forward out of context if

574

00:25:02,430 --> 00:25:00,970

there's any bad results it never

575

00:25:04,560 --> 00:25:02,440

happened put in the bottom drawer and

576

00:25:05,970 --> 00:25:04,570

burn it now as a pediatrician and

577

00:25:07,590 --> 00:25:05,980

someone who's worked with children and

578

00:25:09,360 --> 00:25:07,600

work with a range of patients as a

579

00:25:10,860 --> 00:25:09,370

doctor what do you think is that the

580

00:25:12,810 --> 00:25:10,870

weirdest sort of alternative medicine

581

00:25:15,030 --> 00:25:12,820

practice that you've encountered or seen

582

00:25:16,350 --> 00:25:15,040

ok so number one I'm not a qualified p

583

00:25:18,000 --> 00:25:16,360

diffusion I just worked in the kids

584

00:25:19,020 --> 00:25:18,010

hospital as a junior doctor I'm sorry

585

00:25:20,850 --> 00:25:19,030

about that but yeah I would say there

586

00:25:22,260 --> 00:25:20,860

was a bit of hands-on yeah yeah yeah I

587

00:25:23,550 --> 00:25:22,270

was working the kids hospital as a

588

00:25:26,310 --> 00:25:23,560

junior doctor but I'm not a qualified

589

00:25:29,250 --> 00:25:26,320

fellow of the Australian society of

590

00:25:33,810 --> 00:25:29,260

pediatricians so the weirdest health one

591

00:25:36,720 --> 00:25:33,820

oh god cupping oh right i mean k get ken

592

00:25:38,400 --> 00:25:36,730

can you imagine that creating a vacuum

593

00:25:40,310 --> 00:25:38,410

on somebody's butt back with and putting

594

00:25:44,160 --> 00:25:40,320

a cup on it and raising a big red wheel

595

00:25:47,250 --> 00:25:44,170

will remove these mysterious toxins no

596

00:25:48,420 --> 00:25:47,260

one's pretty dumb oh what's the one

597

00:25:50,670 --> 00:25:48,430

where you lay your hands over their body

598

00:25:52,680 --> 00:25:50,680

beat down a grey key reiki now come on

599

00:25:54,180 --> 00:25:52,690

that one's got to be crazy look the one

600

00:25:54,749 --> 00:25:54,190

I think is pretty well as one with with

601  
00:25:56,609 --> 00:25:54,759  
a balloon

602  
00:25:58,259 --> 00:25:56,619  
up the nose named flake the balloon and

603  
00:25:59,789 --> 00:25:58,269  
it's supposed to align some bones in the

604  
00:26:03,239 --> 00:25:59,799  
nose which is supposed to help your

605  
00:26:04,560 --> 00:26:03,249  
spine help your spine yeah well firstly

606  
00:26:06,449 --> 00:26:04,570  
there's no bones in the nose is only

607  
00:26:09,689 --> 00:26:06,459  
cartilage and secondly because the

608  
00:26:13,229 --> 00:26:09,699  
cartilage has a very poor blood supply

609  
00:26:14,939 --> 00:26:13,239  
like all cartilage hi cocaine use means

610  
00:26:17,339 --> 00:26:14,949  
that the views on a cocaine you have to

611  
00:26:20,369 --> 00:26:17,349  
end up getting a silver plate in your

612  
00:26:23,549 --> 00:26:20,379  
nose and a balloon up your nose blood

613  
00:26:25,619 --> 00:26:23,559

and thirdly I'm trying desperately to

614

00:26:26,849 --> 00:26:25,629

think of any physiological pathway

615

00:26:28,619 --> 00:26:26,859

that'll do something to you spying

616

00:26:30,869 --> 00:26:28,629

nothing I like nothing this is a thing

617

00:26:33,239 --> 00:26:30,879

with the alternative medicine is that

618

00:26:35,819 --> 00:26:33,249

the mechanism is always badly described

619

00:26:37,499 --> 00:26:35,829

if described at all true but you should

620

00:26:39,089 --> 00:26:37,509

realize this that many things in

621

00:26:40,979 --> 00:26:39,099

medicine we don't understand so for

622

00:26:43,680 --> 00:26:40,989

example with anesthetics yeah we know

623

00:26:45,149 --> 00:26:43,690

really well how to give them and what

624

00:26:47,309 --> 00:26:45,159

anesthetics for what sort of person and

625

00:26:51,779 --> 00:26:47,319

the results that can happen in the side

626  
00:26:54,839 --> 00:26:51,789  
effects we do not know the mechanism by

627  
00:26:57,509 --> 00:26:54,849  
which a general anesthetic works we we

628  
00:26:59,939 --> 00:26:57,519  
know the a mechanism by which painkiller

629  
00:27:01,829 --> 00:26:59,949  
such as aspirin or paracetamol works or

630  
00:27:04,259 --> 00:27:01,839  
by which an opiate works or by which

631  
00:27:07,499 --> 00:27:04,269  
caffeine works we know these mechanisms

632  
00:27:08,609 --> 00:27:07,509  
but with anesthetics we don't know but

633  
00:27:12,569 --> 00:27:08,619  
on your land we know how to use them

634  
00:27:14,849 --> 00:27:12,579  
really well and so that's why pianist

635  
00:27:16,439 --> 00:27:14,859  
liters and liters have to do seven years

636  
00:27:19,680 --> 00:27:16,449  
of study so by the way that vet is a

637  
00:27:21,599 --> 00:27:19,690  
myth yeah it's a myth that if you try to

638  
00:27:23,459 --> 00:27:21,609

hold up a bank you just get your sleep

639

00:27:25,319 --> 00:27:23,469

grenade and roll it in and everybody

640

00:27:26,609 --> 00:27:25,329

goes to sleep and nobody dies and

641

00:27:28,949 --> 00:27:26,619

everybody's asleep it ain't that easy

642

00:27:30,089 --> 00:27:28,959

believe it or not it's not that easy you

643

00:27:31,439 --> 00:27:30,099

got to spend mix for seven years of

644

00:27:32,879 --> 00:27:31,449

learning how to put people to sleep I

645

00:27:34,499 --> 00:27:32,889

thought the 60s Batman Chow is a

646

00:27:37,469 --> 00:27:34,509

documentary that's why I get all my pure

647

00:27:38,819 --> 00:27:37,479

science from ah documentary next thing

648

00:27:40,889 --> 00:27:38,829

you tell me everything in the Batcave is

649

00:27:42,779 --> 00:27:40,899

not true it's got signs on it it does I

650

00:27:45,899 --> 00:27:42,789

then a bit idea what isn't a documentary

651  
00:27:47,609 --> 00:27:45,909  
The Terminator okay just kidding oh hey

652  
00:27:49,649 --> 00:27:47,619  
look how random person walking paths

653  
00:27:51,359 --> 00:27:49,659  
with a sign and it says support science

654  
00:27:53,189 --> 00:27:51,369  
not superstition what a good thing

655  
00:27:55,229 --> 00:27:53,199  
that's kind of cool oh now dr. Karl

656  
00:27:57,180 --> 00:27:55,239  
where can we get online to continue the

657  
00:27:58,589 --> 00:27:57,190  
fight and to find out what you're doing

658  
00:28:01,259 --> 00:27:58,599  
and get volved in this discussion well

659  
00:28:03,180 --> 00:28:01,269  
all of us so these people like Wendy

660  
00:28:05,590 --> 00:28:03,190  
zukerman everybody who's doing a podcast

661  
00:28:07,659 --> 00:28:05,600  
in science like me and I

662  
00:28:11,409 --> 00:28:07,669  
you believe you might have won a prize

663  
00:28:13,210 --> 00:28:11,419

yes I I won a UH a castaway award

664

00:28:14,710 --> 00:28:13,220

podcast it's ryan podcast award for

665

00:28:16,690 --> 00:28:14,720

comedy about you wouldn't want any of

666

00:28:18,850 --> 00:28:16,700

the science podcasts to win the comedy

667

00:28:20,710 --> 00:28:18,860

section or you'd be in trouble okay good

668

00:28:22,960 --> 00:28:20,720

look there's a lot of good stuff in they

669

00:28:27,340 --> 00:28:22,970

go for the peer-reviewed stuff dr. Cal

670

00:28:28,630 --> 00:28:27,350

com the ABC's really good the skeptics

671

00:28:30,220 --> 00:28:28,640

come on you gotta go to the skeptics

672

00:28:31,240 --> 00:28:30,230

society they're really good okay cal

673

00:28:32,620 --> 00:28:31,250

good luck they're giving your speech

674

00:28:34,539 --> 00:28:32,630

today what's gonna be the topic of your

675

00:28:35,830 --> 00:28:34,549

talk when you go to the rally today I'm

676

00:28:37,539 --> 00:28:35,840

not giving a talk I thought you'd get

677

00:28:39,430 --> 00:28:37,549

out there and go yay science or

678

00:28:41,740 --> 00:28:39,440

something I will but I'm just a face in

679

00:28:44,020 --> 00:28:41,750

the crowd I'm just supporting other

680

00:28:45,399 --> 00:28:44,030

people cool Carl supporting signs

681

00:28:49,810 --> 00:28:45,409

supporting the march supporting the

682

00:28:52,149 --> 00:28:49,820

rally get with it cute amend and of

683

00:28:54,010 --> 00:28:52,159

course who is the editor of many famous

684

00:28:56,500 --> 00:28:54,020

publications the best-known one which is

685

00:28:58,390 --> 00:28:56,510

a skeptic that's right which is the

686

00:28:59,440 --> 00:28:58,400

second oldest skeptic publication in the

687

00:29:01,210 --> 00:28:59,450

world which is the bane of your

688

00:29:03,220 --> 00:29:01,220

existence isn't a second oldest how

689

00:29:05,590 --> 00:29:03,230

crappy I am trying to get the other one

690

00:29:09,940 --> 00:29:05,600

closed down yeah well so how many years

691

00:29:11,500 --> 00:29:09,950

you've been around for 37 years a long

692

00:29:13,299 --> 00:29:11,510

time he's seen everything what is the

693

00:29:15,010 --> 00:29:13,309

latest thing but in the world of woo

694

00:29:16,960 --> 00:29:15,020

stuff that pseudoscience that everyone's

695

00:29:19,270 --> 00:29:16,970

putting their cash down to buy cake

696

00:29:20,860 --> 00:29:19,280

stand right now so bye I think flying

697

00:29:22,299 --> 00:29:20,870

saucers actually look they're back again

698

00:29:23,620 --> 00:29:22,309

are they back again mate yeah I just saw

699

00:29:25,360 --> 00:29:23,630

a big article actually under proof of

700

00:29:26,620 --> 00:29:25,370

flying saucers a lot of people look I'm

701

00:29:28,180 --> 00:29:26,630

sort of down with the sources thing I'm

702

00:29:29,680 --> 00:29:28,190

down with the UFO thing but I'm just not

703

00:29:32,799 --> 00:29:29,690

sure if it's an extraterrestrial event

704

00:29:34,930 --> 00:29:32,809

and interdimensional events or an ultra

705

00:29:37,539 --> 00:29:34,940

traversal event I think it's a dream

706

00:29:38,860 --> 00:29:37,549

world yeah yeah it was just a dream so

707

00:29:40,480 --> 00:29:38,870

what is the best I mean what about

708

00:29:42,490 --> 00:29:40,490

westall 66 that was a pretty good

709

00:29:45,250 --> 00:29:42,500

sighting a mass sighting by school kids

710

00:29:47,260 --> 00:29:45,260

of a UFO in Melbourne it was pretty good

711

00:29:49,240 --> 00:29:47,270

pretty good not bad I do by the one

712

00:29:52,029 --> 00:29:49,250

actually done by a skeptic in the mid

713

00:29:53,260 --> 00:29:52,039

80s which was a laser beam that confused

714

00:29:54,970 --> 00:29:53,270

a lot of people that was a junior when

715

00:29:58,390 --> 00:29:54,980

you were fo citing done by a skip you're

716

00:29:59,770 --> 00:29:58,400

so creation UFO creation done by a

717

00:30:01,419 --> 00:29:59,780

skeptic yeah well do you think it's a

718

00:30:03,669 --> 00:30:01,429

bit mean-spirited of skeptics to do

719

00:30:05,049 --> 00:30:03,679

these sort of Zeno these fake hoaxes

720

00:30:07,000 --> 00:30:05,059

from time to time being that what

721

00:30:08,950 --> 00:30:07,010

skeptics likely just a barrel of fun yes

722

00:30:10,899 --> 00:30:08,960

I like a joke they like a beard I'm

723

00:30:12,190 --> 00:30:10,909

happy it actually with the March for

724

00:30:14,020 --> 00:30:12,200

science today what do you think we will

725

00:30:15,280 --> 00:30:14,030

there be any neck beards here at the

726

00:30:17,350 --> 00:30:15,290

march for science that's what I want to

727

00:30:18,610 --> 00:30:17,360

know any neck beards I went looking

728

00:30:19,120 --> 00:30:18,620

forward to the beams I just run around

729

00:30:21,310 --> 00:30:19,130

without

730

00:30:22,720 --> 00:30:21,320

the starch yeah we're keeping an eye out

731

00:30:24,640 --> 00:30:22,730

for that and wink quickly see where can

732

00:30:28,210 --> 00:30:24,650

we get your stuff online you can go to

733

00:30:30,220 --> 00:30:28,220

ww a px Comte you and just look up the

734

00:30:31,510 --> 00:30:30,230

magazine more you can find a contact for

735

00:30:33,580 --> 00:30:31,520

me I'd actually just get in touch with

736

00:30:37,710 --> 00:30:33,590

me always welcome to hear people look

737

00:30:41,200 --> 00:30:39,760

because jessica singh is here as well

738

00:30:42,670 --> 00:30:41,210

from the Australian skeptics all ready

739

00:30:43,870 --> 00:30:42,680

to march for science to think this is

740

00:30:45,340 --> 00:30:43,880

the first thing you can remember of any

741

00:30:47,950 --> 00:30:45,350

ilka like that so we had a science

742

00:30:49,360 --> 00:30:47,960

margin Sydney before ever not that I can

743

00:30:51,520 --> 00:30:49,370

remember I mean there there have been

744

00:30:54,090 --> 00:30:51,530

other matches and I say when when I told

745

00:30:57,760 --> 00:30:54,100

my mother that I was coming along today

746

00:30:59,860 --> 00:30:57,770

she said we're very sturdy shoes because

747

00:31:01,540 --> 00:30:59,870

her recollection of marchers goes back

748

00:31:03,520 --> 00:31:01,550

to the Vietnam War yes so she's

749

00:31:05,080 --> 00:31:03,530

expecting some horses charging in a bit

750

00:31:08,050 --> 00:31:05,090

of a bit of smoke teargas going off

751

00:31:11,080 --> 00:31:08,060

before you know cops with with long

752

00:31:13,300 --> 00:31:11,090

sticks and cattle prods and all sorts of

753

00:31:16,180 --> 00:31:13,310

things and I i had to disillusion her

754

00:31:17,860 --> 00:31:16,190

she was she was very excited but I don't

755

00:31:20,830 --> 00:31:17,870

think it's gonna be like that mini rally

756

00:31:22,780 --> 00:31:20,840

can always turn ugly but yeah say your

757

00:31:24,130 --> 00:31:22,790

mum's more hardcore than you basically

758

00:31:26,230 --> 00:31:24,140

that's what you're saying Oh totally

759

00:31:28,690 --> 00:31:26,240

totally I mean my my family you know

760

00:31:30,190 --> 00:31:28,700

full of hippies and my aunt said that

761

00:31:31,630 --> 00:31:30,200

she always knew when my cousins were

762

00:31:34,300 --> 00:31:31,640

going to go to a demo because they

763

00:31:35,860 --> 00:31:34,310

actually put shoes on otherwise they'd

764

00:31:37,450 --> 00:31:35,870

go barefoot but they had to put shoes on

765

00:31:38,980 --> 00:31:37,460

when going to a demo otherwise the cops

766

00:31:41,080 --> 00:31:38,990

would you know stamp on their feet and

767

00:31:42,610 --> 00:31:41,090

yeah yeah and where do you think we're

768

00:31:43,750 --> 00:31:42,620

letting science down from this rally

769

00:31:46,920 --> 00:31:43,760

today what do you think we should be

770

00:31:52,330 --> 00:31:50,110

research money general support support

771

00:31:55,090 --> 00:31:52,340

from the politicians just just your

772

00:31:59,140 --> 00:31:55,100

acceptance of the methodology and

773

00:32:03,010 --> 00:31:59,150

acceptance of good research it's some

774

00:32:06,680 --> 00:32:03,020

astounding that the the politicians and

775

00:32:10,810 --> 00:32:06,690

the people in power just

776

00:32:13,600 --> 00:32:10,820

at a whim reject what they don't like it

777

00:32:17,060 --> 00:32:13,610

just doesn't work that way mid their

778

00:32:19,940 --> 00:32:17,070

science is is a political it's it's

779

00:32:21,680 --> 00:32:19,950

nonpartisan it's a methodology I mean

780

00:32:23,450 --> 00:32:21,690

okay yeah sometimes the ego gets in the

781

00:32:26,540 --> 00:32:23,460

way but we're all human so it's not

782

00:32:29,150 --> 00:32:26,550

perfect but it's not a faith it's not a

783

00:32:31,570 --> 00:32:29,160

belief it is impartial and and it should

784

00:32:34,130 --> 00:32:31,580

be treated as such it's a source of of

785

00:32:36,290 --> 00:32:34,140

useful information which can feed into

786

00:32:39,820 --> 00:32:36,300

proper policies so what do you think of

787

00:32:44,600 --> 00:32:39,830

the term alternative facts then oh my

788

00:32:46,040 --> 00:32:44,610

just bear me we're here with the

789

00:32:47,690 --> 00:32:46,050

president of Australian skeptics he's a

790

00:32:50,030 --> 00:32:47,700

very powerful man in fact this man have

791

00:32:51,710 --> 00:32:50,040

wheels more power than Donald Trump he

792

00:32:53,330 --> 00:32:51,720

is the president I press how are you

793

00:32:54,530 --> 00:32:53,340

very good how are you pretty good now

794

00:32:55,790 --> 00:32:54,540

I'm not affiliated with the Australian

795

00:32:57,980 --> 00:32:55,800

skeptics I'm what they call a fellow

796

00:33:00,200 --> 00:32:57,990

traveler or just a goose in fact I never

797

00:33:01,880 --> 00:33:00,210

went to school for too long really so

798

00:33:05,330 --> 00:33:01,890

it's definitely really smart to be a

799

00:33:06,470 --> 00:33:05,340

skeptic president no I go ah he's going

800

00:33:07,640 --> 00:33:06,480

to be really good at faking it actually

801

00:33:10,490 --> 00:33:07,650

what's your favorite area of science

802

00:33:12,350 --> 00:33:10,500

since we're marching for it today ah it

803

00:33:14,330 --> 00:33:12,360

would have well my favorite area of

804

00:33:17,390 --> 00:33:14,340

science is astronomy which is not really

805

00:33:19,250 --> 00:33:17,400

in danger I think climate science is

806

00:33:20,960 --> 00:33:19,260

probably the the stuff that we are

807

00:33:22,340 --> 00:33:20,970

mostly marching for today that is

808

00:33:24,080 --> 00:33:22,350

probably the area of science that is

809

00:33:25,340 --> 00:33:24,090

most under attack now this is because

810

00:33:28,760 --> 00:33:25,350

it's the most currently the most

811

00:33:30,620 --> 00:33:28,770

politicized yeah of course the thing is

812

00:33:33,460 --> 00:33:30,630

that for some reason people choose not

813

00:33:37,760 --> 00:33:33,470

to accept the science of climate change

814

00:33:40,310 --> 00:33:37,770

because it's inconvenient and I do think

815

00:33:42,080 --> 00:33:40,320

that we see that the acceptance of the

816

00:33:43,160 --> 00:33:42,090

science falls along political ions which

817

00:33:45,020 --> 00:33:43,170

kind of tells you everything you need to

818

00:33:46,310 --> 00:33:45,030

know okay but of course we do have a

819

00:33:47,930 --> 00:33:46,320

massive coal industry in this country

820

00:33:50,240 --> 00:33:47,940

which should be affected so they think

821

00:33:53,210 --> 00:33:50,250

in jobs on top of that that's where

822

00:33:55,100 --> 00:33:53,220

politics comes into it mmm okay so where

823

00:33:57,380 --> 00:33:55,110

can we continue the fight today from

824

00:33:59,180 --> 00:33:57,390

today onwards well you just have to

825

00:34:01,430 --> 00:33:59,190

continue to men to remind people how

826

00:34:04,790 --> 00:34:01,440

science works for them I like to always

827

00:34:06,890 --> 00:34:04,800

mention two areas of science where

828

00:34:10,130 --> 00:34:06,900

people don't understand how basic

829

00:34:13,010 --> 00:34:10,140

science curiosity based research has led

830

00:34:15,389 --> 00:34:13,020

to huge improvements for people in their

831

00:34:18,539 --> 00:34:15,399

day-to-day lives one area is

832

00:34:20,250 --> 00:34:18,549

cancer where nowadays for most cancers

833

00:34:22,169 --> 00:34:20,260

there's a better than fifty percent cure

834

00:34:24,119 --> 00:34:22,179

rate and that did not come from people

835

00:34:26,190 --> 00:34:24,129

looking for a cure for cancer that came

836

00:34:28,349 --> 00:34:26,200

from people doing basic research on cell

837

00:34:30,419 --> 00:34:28,359

biology and stuff like that and in

838

00:34:32,789 --> 00:34:30,429

finding things that eventually led to

839

00:34:35,399 --> 00:34:32,799

cures for specific two kinds of cancer

840

00:34:39,419 --> 00:34:35,409

and the other is in our pockets you know

841

00:34:41,450 --> 00:34:39,429

without without basic science without

842

00:34:43,619 --> 00:34:41,460

basic science this would not be working

843

00:34:47,159 --> 00:34:43,629

we would not be have we would not have

844

00:34:48,659 --> 00:34:47,169

mobiles we would not have GPS basic

845

00:34:52,230 --> 00:34:48,669

science affects us every day of our

846

00:34:55,919 --> 00:34:52,240

lives we reduce funding for for research

847

00:34:58,109 --> 00:34:55,929

for again blue sky research at the early

848

00:35:02,309 --> 00:34:58,119

stage then we actually are affecting the

849

00:35:03,329 --> 00:35:02,319

outcomes in 20 and 30 years time I just

850

00:35:05,160 --> 00:35:03,339

across the road the New South Wales

851  
00:35:07,559 --> 00:35:05,170  
Police have turned up to keep an eye on

852  
00:35:09,720 --> 00:35:07,569  
the March for science here I can care

853  
00:35:12,029 --> 00:35:09,730  
about 15 police so I'm not quite sure if

854  
00:35:13,170 --> 00:35:12,039  
that's a decent turnout for this kind of

855  
00:35:15,720 --> 00:35:13,180  
thing or not i don't know if it's an

856  
00:35:17,760 --> 00:35:15,730  
underwear there underrating the value of

857  
00:35:19,349 --> 00:35:17,770  
the but if they're under rating the

858  
00:35:22,380 --> 00:35:19,359  
value of the march for science or

859  
00:35:24,269 --> 00:35:22,390  
whether they're overrating it but 15 and

860  
00:35:27,079 --> 00:35:24,279  
all fairness to it it's time and a half

861  
00:35:29,220 --> 00:35:27,089  
and I said day you can't blame them

862  
00:35:32,640 --> 00:35:29,230  
local ask you questions about why you're

863  
00:35:36,500 --> 00:35:32,650

here today for the science march i'm

864

00:35:39,660 --> 00:35:36,510

here because i believe in evidence-based

865

00:35:41,730 --> 00:35:39,670

decision-making processes and what you

866

00:35:45,030 --> 00:35:41,740

think is the biggest threat to that

867

00:35:49,620 --> 00:35:45,040

I just think the biggest threat to that

868

00:35:52,370 --> 00:35:49,630

it's fake news and I think that we all

869

00:35:55,680 --> 00:35:52,380

need to sit back and just problem-solve

870

00:35:58,650 --> 00:35:55,690

before we get hysterical about ego

871

00:35:59,490 --> 00:35:58,660

maniacs who are running countries so

872

00:36:02,580 --> 00:35:59,500

what do you think with the phrase

873

00:36:05,130 --> 00:36:02,590

alternative facts then not very much

874

00:36:08,820 --> 00:36:05,140

yeah that's very polite of you thank you

875

00:36:10,230 --> 00:36:08,830

very much well we've got someone who's

876

00:36:11,850 --> 00:36:10,240

pretty famous within one division of

877

00:36:14,070 --> 00:36:11,860

science here so what's your division of

878

00:36:16,380 --> 00:36:14,080

science and what's your name by karcher

879

00:36:17,970 --> 00:36:16,390

I'm the Union New South Wales I must say

880

00:36:20,820 --> 00:36:17,980

having been a Dean of science at the

881

00:36:22,710 --> 00:36:20,830

University every aspect of science to me

882

00:36:24,510 --> 00:36:22,720

is absolutely critical you've got to

883

00:36:26,760 --> 00:36:24,520

switch stop for paleontology but haven't

884

00:36:29,070 --> 00:36:26,770

you I do and in fact of course what we

885

00:36:31,320 --> 00:36:29,080

do is use our science to learn from the

886

00:36:34,890 --> 00:36:31,330

past to understand what's happening now

887

00:36:36,870 --> 00:36:34,900

in order to conserve these key issues

888

00:36:38,340 --> 00:36:36,880

into the future so we're weaving

889

00:36:39,570 --> 00:36:38,350

together the past president in the

890

00:36:41,850 --> 00:36:39,580

future what do you think is the biggest

891

00:36:43,560 --> 00:36:41,860

threat to science science funding and

892

00:36:46,080 --> 00:36:43,570

science thinking generally in Australia

893

00:36:48,900 --> 00:36:46,090

at the moment I guess it's the same

894

00:36:52,070 --> 00:36:48,910

threat that sort of infiltrating and

895

00:36:54,300 --> 00:36:52,080

contaminating the world is the idea that

896

00:36:56,250 --> 00:36:54,310

conspiratorial ideas that we don't have

897

00:36:58,950 --> 00:36:56,260

to worry about climate change we don't

898

00:37:00,800 --> 00:36:58,960

have to worry about diseases that

899

00:37:04,080 --> 00:37:00,810

somehow everything's going to be fine

900

00:37:06,330 --> 00:37:04,090

this scares me live scares everybody we

901  
00:37:10,250 --> 00:37:06,340  
have got to embrace science as the only

902  
00:37:13,530 --> 00:37:10,260  
way this sold an opportunity Sydney not

903  
00:37:15,450 --> 00:37:13,540  
early in my career I went to the town

904  
00:37:18,180 --> 00:37:15,460  
hall and I heard Ralph Nader the

905  
00:37:22,080 --> 00:37:18,190  
consumer activist speaking about what he

906  
00:37:24,300 --> 00:37:22,090  
called the duty of citizens to do

907  
00:37:25,950 --> 00:37:24,310  
something for their communities and he

908  
00:37:27,720 --> 00:37:25,960  
put it to everybody in the room it was

909  
00:37:31,170 --> 00:37:27,730  
made a big impression of me in my early

910  
00:37:33,840 --> 00:37:31,180  
20s that you ought to despite what you

911  
00:37:35,460 --> 00:37:33,850  
do at your life just do something to

912  
00:37:36,810 --> 00:37:35,470  
contribute towards the community and

913  
00:37:40,200 --> 00:37:36,820

I've been trying to do that for the last

914

00:37:43,859 --> 00:37:40,210

40 years but many scientists

915

00:37:47,940 --> 00:37:43,869

many scientists for all the fantastic

916

00:37:51,359 --> 00:37:47,950

work that we all do are very shy about

917

00:37:54,320 --> 00:37:51,369

telling the world about what we do so

918

00:37:57,870 --> 00:37:54,330

I'd like to appropriate Ralph Nader's

919

00:37:59,940 --> 00:37:57,880

you know mission for us all and say if

920

00:38:02,010 --> 00:37:59,950

you're a scientist if you're doing

921

00:38:03,810 --> 00:38:02,020

fantastic work if you're doing work

922

00:38:07,290 --> 00:38:03,820

that's important for the future of

923

00:38:10,710 --> 00:38:07,300

humanity and our planet please make it

924

00:38:13,650 --> 00:38:10,720

your scientists citizens duty to get out

925

00:38:16,710 --> 00:38:13,660

there and write for the public about it

926  
00:38:19,980 --> 00:38:16,720  
to speak to the media about it to speak

927  
00:38:22,290 --> 00:38:19,990  
to community groups about it 22 can

928  
00:38:25,260 --> 00:38:22,300  
write penal politicians to attend

929  
00:38:29,820 --> 00:38:25,270  
meetings like this thank you very much

930  
00:38:35,050 --> 00:38:29,830  
[Applause]

931  
00:38:38,200 --> 00:38:35,060  
and everyone I meet has an interest in

932  
00:38:40,360 --> 00:38:38,210  
science what to eat how to exercise the

933  
00:38:43,360 --> 00:38:40,370  
best way is to deal with cancer why

934  
00:38:45,640 --> 00:38:43,370  
people think the way they do these are

935  
00:38:48,850 --> 00:38:45,650  
all questions best engage with through

936  
00:38:51,480 --> 00:38:48,860  
science not because scientists know best

937  
00:38:55,240 --> 00:38:51,490  
it's simply because as you all know

938  
00:38:57,520 --> 00:38:55,250

science is a method not a tablet set in

939

00:39:01,240 --> 00:38:57,530

stone it's a way of gathering and

940

00:39:12,520 --> 00:39:01,250

testing ideas and evidence to find the

941

00:39:15,550 --> 00:39:12,530

truth and yet there are still people

942

00:39:18,180 --> 00:39:15,560

some of them in power who believe

943

00:39:23,100 --> 00:39:18,190

science and scientists are somehow

944

00:39:29,740 --> 00:39:23,110

separate from society do they find truth

945

00:39:32,950 --> 00:39:29,750

inconvenient well and as in a post fact

946

00:39:38,350 --> 00:39:32,960

world well there's another word for post

947

00:39:40,360 --> 00:39:38,360

facts isn't then it's lies so why don't

948

00:39:43,000 --> 00:39:40,370

we all and those people in particular

949

00:39:44,500 --> 00:39:43,010

try this little thought experiment try

950

00:39:47,050 --> 00:39:44,510

getting up in the morning and noticing

951  
00:39:50,470 --> 00:39:47,060  
every time you have to thank a scientist

952  
00:39:52,810 --> 00:39:50,480  
okay so for me it starts with my alarm I

953  
00:39:56,260 --> 00:39:52,820  
would reach over to my smartphone and

954  
00:39:57,940 --> 00:39:56,270  
turn it off Thank You smartphone for

955  
00:40:00,340 --> 00:39:57,950  
being clever enough to go to the right

956  
00:40:02,320 --> 00:40:00,350  
time zone no matter where I am thank you

957  
00:40:04,090 --> 00:40:02,330  
to all the satellites and the rocket

958  
00:40:06,550 --> 00:40:04,100  
scientists who develop them so they can

959  
00:40:09,040 --> 00:40:06,560  
bounce that useful information into my

960  
00:40:13,150 --> 00:40:09,050  
phone I swing over to get up out of bed

961  
00:40:17,380 --> 00:40:13,160  
I'm cool my legs actually work Thank You

962  
00:40:20,500 --> 00:40:17,390  
scientist who turned me into a cyborg by

963  
00:40:23,380 --> 00:40:20,510

inventing the titanium artificial disk I

964

00:40:28,530 --> 00:40:23,390

have inserted in my spine to solve

965

00:40:31,930 --> 00:40:30,520

well it's all going on here right behind

966

00:40:33,430 --> 00:40:31,940

us which is why I'm speaking in hushed

967

00:40:35,400 --> 00:40:33,440

tones with ilithyia what do you think of

968

00:40:38,530 --> 00:40:35,410

the rally here today it's been

969

00:40:40,480 --> 00:40:38,540

incredibly inspiring to see all the

970

00:40:42,310 --> 00:40:40,490

people that have shown of its I don't

971

00:40:44,710 --> 00:40:42,320

know what I was expecting but the crowd

972

00:40:46,750 --> 00:40:44,720

that shown up from all kinds of

973

00:40:49,630 --> 00:40:46,760

university is all walks of life has been

974

00:40:51,130 --> 00:40:49,640

really spectacular you can't knock the

975

00:40:53,200 --> 00:40:51,140

diversity there's even been New

976  
00:40:56,470 --> 00:40:53,210  
Zealanders here New Zealanders for god

977  
00:40:59,230 --> 00:40:56,480  
sake that's if they've even been Quakers

978  
00:41:00,280 --> 00:40:59,240  
Quakers for science for sure that I

979  
00:41:03,910 --> 00:41:00,290  
wasn't quite sure what they were getting

980  
00:41:05,590 --> 00:41:03,920  
at but they're welcome yep and the

981  
00:41:08,800 --> 00:41:05,600  
speeches have been really riveting as

982  
00:41:10,480 --> 00:41:08,810  
well you had had ex politicians talking

983  
00:41:12,160 --> 00:41:10,490  
had scientists had people from the

984  
00:41:13,660 --> 00:41:12,170  
social sciences all getting up there and

985  
00:41:15,190 --> 00:41:13,670  
I think right now we have someone

986  
00:41:17,290 --> 00:41:15,200  
talking about vaccinations or is a

987  
00:41:19,150 --> 00:41:17,300  
important topic for the skeptics yeah

988  
00:41:31,950 --> 00:41:19,160

yep so it's all going on right behind us

989

00:41:35,470 --> 00:41:34,390

hey dr. Carla right well he's just kind

990

00:41:37,680 --> 00:41:35,480

of finish here what did you make it the

991

00:41:40,540 --> 00:41:37,690

statements that were made by the people

992

00:41:44,500 --> 00:41:40,550

inspiring step in the right direction

993

00:41:46,630 --> 00:41:44,510

but the bottom line is if today is all

994

00:41:49,270 --> 00:41:46,640

we get we're fail we've got to keep the

995

00:41:50,380 --> 00:41:49,280

momentum going okay because people tend

996

00:41:54,850 --> 00:41:50,390

to go oh yeah I've done that yeah and

997

00:41:56,770 --> 00:41:54,860

then they move on yeah yes my feeling

998

00:41:58,990 --> 00:41:56,780

nowadays is that people should go into

999

00:42:02,170 --> 00:41:59,000

politics you see in some parts of the

1000

00:42:06,130 --> 00:42:02,180

world power grows out of the barrel of a

1001

00:42:09,640 --> 00:42:06,140

gun but in many other countries power

1002

00:42:10,780 --> 00:42:09,650

comes from politics and one of the most

1003

00:42:13,240 --> 00:42:10,790

effective thing that the politicians

1004

00:42:15,220 --> 00:42:13,250

ever did we say I don't know the

1005

00:42:17,620 --> 00:42:15,230

politics is really boring so for example

1006

00:42:20,050 --> 00:42:17,630

you might have had the Prime Minister

1007

00:42:22,180 --> 00:42:20,060

John Howard walking around in a canary

1008

00:42:24,010 --> 00:42:22,190

yellow jumpsuit and saying out of the

1009

00:42:27,190 --> 00:42:24,020

male wearing a funny jumpsuit but at the

1010

00:42:28,810 --> 00:42:27,200

same time he had spent one half of our

1011

00:42:32,650 --> 00:42:28,820

gross domestic product on some

1012

00:42:36,610 --> 00:42:32,660

submarines it never worked so people

1013

00:42:37,720 --> 00:42:36,620

should go into policies EMC look I'm

1014

00:42:40,450 --> 00:42:37,730

talking to someone just keep shouting

1015

00:42:42,010 --> 00:42:40,460

out to shred your educational names out

1016

00:42:43,450 --> 00:42:42,020

there Mary to you and the University of

1017

00:42:44,770 --> 00:42:43,460

Southern Queensland that's not a real

1018

00:42:47,080 --> 00:42:44,780

thing that was just a joke wasn't it

1019

00:42:48,940 --> 00:42:47,090

look it's been fantastic to be here and

1020

00:42:50,530 --> 00:42:48,950

speak up for science and have an

1021

00:42:52,540 --> 00:42:50,540

audience where everybody appears to have

1022

00:42:54,370 --> 00:42:52,550

a university that they're supporting

1023

00:42:55,960 --> 00:42:54,380

more a passion for science and evidence

1024

00:42:57,370 --> 00:42:55,970

so it's been great what do you think's

1025

00:42:58,120 --> 00:42:57,380

been a stronger statement that came out

1026

00:42:59,620 --> 00:42:58,130

of today there's been a lot of

1027

00:43:04,300 --> 00:42:59,630

interesting things said by the five or

1028

00:43:08,110 --> 00:43:04,310

six speakers on stage I suppose you know

1029

00:43:10,720 --> 00:43:08,120

I was very very affected by the climate

1030

00:43:13,630 --> 00:43:10,730

scientists from the University of New

1031

00:43:15,640 --> 00:43:13,640

South Wales who spoke a lot about the

1032

00:43:17,500 --> 00:43:15,650

work she's doing about the ocean and

1033

00:43:19,930 --> 00:43:17,510

what it tells us about climate change I

1034

00:43:21,400 --> 00:43:19,940

was pleased to see John Hewson talking

1035

00:43:23,560 --> 00:43:21,410

about the importance of evidence in the

1036

00:43:25,360 --> 00:43:23,570

development of public policy I love to

1037

00:43:28,660 --> 00:43:25,370

hear Eva Cox talking about the

1038

00:43:31,990 --> 00:43:28,670

significance of civil society Simon

1039

00:43:33,520 --> 00:43:32,000

Chapman a professor of Public Health who

1040

00:43:35,650 --> 00:43:33,530

has done more than probably anyone in

1041

00:43:38,080 --> 00:43:35,660

this country to stop people using

1042

00:43:40,330 --> 00:43:38,090

tobacco and saved lots of lives I mean

1043

00:43:41,499 --> 00:43:40,340

it was fantastic to hear him you know I

1044

00:43:44,559 --> 00:43:41,509

could go on I think

1045

00:43:47,349 --> 00:43:44,569

speaker made a powerful contribution

1046

00:43:50,199 --> 00:43:47,359

Luke Briscoe the young Aboriginal man in

1047

00:43:51,099 --> 00:43:50,209

digilab an organization to make sure

1048

00:43:53,589 --> 00:43:51,109

that Aboriginal and Torres Strait

1049

00:43:56,769 --> 00:43:53,599

Islander people are leaders in relation

1050

00:43:59,949 --> 00:43:56,779

to new technologies and I also love to

1051  
00:44:01,870 --> 00:43:59,959  
see here John Jonica newbury talking

1052  
00:44:04,299 --> 00:44:01,880  
about her work on catalyst on ABC

1053  
00:44:06,939 --> 00:44:04,309  
television and her commitment to public

1054  
00:44:08,409 --> 00:44:06,949  
education and science literacy and thank

1055  
00:44:09,849 --> 00:44:08,419  
you for being such a great host today

1056  
00:44:13,029 --> 00:44:09,859  
thank you thank you I'm going to catch

1057  
00:44:14,289 --> 00:44:13,039  
up with the monster boy yes that

1058  
00:44:16,359 --> 00:44:14,299  
drumming you can hear in the distance is

1059  
00:44:18,519 --> 00:44:16,369  
the March going past us and I'm just

1060  
00:44:20,199 --> 00:44:18,529  
running along after Richard Saunders now

1061  
00:44:22,530 --> 00:44:20,209  
to catch up with the marta to join up

1062  
00:44:26,589 --> 00:44:22,540  
with the actual march for science

1063  
00:44:26,599 --> 00:44:31,470

alright

1064

00:44:35,109 --> 00:44:33,640

okay here we are with the master science

1065

00:44:37,480 --> 00:44:35,119

it's going past right now most of these

1066

00:44:38,950 --> 00:44:37,490

people have much more tertiary education

1067

00:44:40,569 --> 00:44:38,960

that I've ever had because as I've made

1068

00:44:42,460 --> 00:44:40,579

mention darling rent to you 11 but

1069

00:44:44,289 --> 00:44:42,470

they're marching for science marching

1070

00:44:46,539 --> 00:44:44,299

for truth marching for peer-reviewed

1071

00:44:49,260 --> 00:44:46,549

evidence all sorts and stuff like that

1072

00:44:58,810 --> 00:44:49,270

checking all these people here

1073

00:45:03,020 --> 00:45:01,310

yes who tis the marks of science and as

1074

00:45:03,950 --> 00:45:03,030

you'll see there's one cool band leading

1075

00:45:05,750 --> 00:45:03,960

the whole thing now one of the things

1076  
00:45:08,390 --> 00:45:05,760  
that science has been able to disprove

1077  
00:45:09,950 --> 00:45:08,400  
is the existence of the cowbell you will

1078  
00:45:11,660 --> 00:45:09,960  
hear the wood block but you will not

1079  
00:45:13,910 --> 00:45:11,670  
hear the cowbell there because basically

1080  
00:45:16,370 --> 00:45:13,920  
these people are cowbell deniers and I

1081  
00:45:20,630 --> 00:45:16,380  
can't blame me they don't need more

1082  
00:45:36,650 --> 00:45:20,640  
cowbell Marsha for science science

1083  
00:45:39,050 --> 00:45:36,660  
science science chatter chan oh we

1084  
00:45:43,010 --> 00:45:39,060  
haven't found as the bang goes passes

1085  
00:45:44,540 --> 00:45:43,020  
we've found the skeptics own fan yeah hi

1086  
00:45:47,480 --> 00:45:44,550  
Gideon what do you like it when you make

1087  
00:45:50,000 --> 00:45:47,490  
the March today I think it's amazing

1088  
00:45:51,290 --> 00:45:50,010

very successful it's yeah great to be

1089

00:45:53,060 --> 00:45:51,300

marching for a cause that I agree with

1090

00:45:54,530 --> 00:45:53,070

was there any the speakers that were on

1091

00:45:55,820 --> 00:45:54,540

that you particularly agreed with or any

1092

00:45:58,130 --> 00:45:55,830

that they think they said you thought

1093

00:46:00,350 --> 00:45:58,140

yet that's a good thing I really I

1094

00:46:02,900 --> 00:46:00,360

really agreed with the statement at the

1095

00:46:04,790 --> 00:46:02,910

fray the idea that science is not an

1096

00:46:07,190 --> 00:46:04,800

ivory tower I thought that was brilliant

1097

00:46:09,950 --> 00:46:07,200

I think you look around half the people

1098

00:46:12,160 --> 00:46:09,960

who have kids everyone's really I know

1099

00:46:14,450 --> 00:46:12,170

coming together and no one no one is a

1100

00:46:17,000 --> 00:46:14,460

crazy person in a white coat you know

1101  
00:46:19,610 --> 00:46:17,010  
everyone here is just a normal person in

1102  
00:46:21,080 --> 00:46:19,620  
jeans and a t-shirt aside from the

1103  
00:46:23,570 --> 00:46:21,090  
science party who are all wearing lab

1104  
00:46:25,280 --> 00:46:23,580  
coats know and thanks for coming on and

1105  
00:46:27,440 --> 00:46:25,290  
being on our show now you're you're

1106  
00:46:29,240 --> 00:46:27,450  
actually on the show and a listener at

1107  
00:46:31,430 --> 00:46:29,250  
your two worlds will collide it's like

1108  
00:46:32,540 --> 00:46:31,440  
matter and antimatter I'm sure listening

1109  
00:46:35,750 --> 00:46:32,550  
to my voice will be a horrifying

1110  
00:46:37,490 --> 00:46:35,760  
experience hey you've got a pro

1111  
00:46:38,900 --> 00:46:37,500  
vaccination sign they want you don't

1112  
00:46:42,320 --> 00:46:38,910  
tell us what's on your side and why you

1113  
00:46:45,290 --> 00:46:42,330

why you chose that one well because I'm

1114

00:46:47,360 --> 00:46:45,300

a midwife and immunization is incredibly

1115

00:46:49,640 --> 00:46:47,370

important to us and it's all evidence

1116

00:46:53,660 --> 00:46:49,650

based research that we base our practice

1117

00:46:56,540 --> 00:46:53,670

on and so I'd have to say sighs it's got

1118

00:46:58,550 --> 00:46:56,550

smallpox me neither thanks science yeah

1119

00:47:00,980 --> 00:46:58,560

Thank You science move all the evidence

1120

00:47:03,140 --> 00:47:00,990

that has gone into and all the research

1121

00:47:05,390 --> 00:47:03,150

to help us with our immunization program

1122

00:47:06,860 --> 00:47:05,400

that we follow can I just ask it almost

1123

00:47:08,180 --> 00:47:06,870

like the controversial question that I

1124

00:47:09,710 --> 00:47:08,190

only have half knowledge on it might be

1125

00:47:10,109 --> 00:47:09,720

making a broad-based incorrect statement

1126

00:47:12,720 --> 00:47:10,119

of

1127

00:47:15,420 --> 00:47:12,730

where do duelers fit into the whole

1128

00:47:17,339 --> 00:47:15,430

thing oh we welcome Jill as we love them

1129

00:47:18,690 --> 00:47:17,349

because I wasn't quite sure if they're

1130

00:47:20,460 --> 00:47:18,700

like an alternative thing that's not

1131

00:47:22,109 --> 00:47:20,470

good online how's that whole work air

1132

00:47:24,720 --> 00:47:22,119

you just explain what I'm talking about

1133

00:47:26,999 --> 00:47:24,730

the other side so jewelers with a

1134

00:47:29,009 --> 00:47:27,009

midwife we're a registered Midwife so we

1135

00:47:30,989 --> 00:47:29,019

go to university and we studied to be a

1136

00:47:32,849 --> 00:47:30,999

midwife for about three years that's if

1137

00:47:35,069 --> 00:47:32,859

or you become a nurse first and then you

1138

00:47:37,559 --> 00:47:35,079

can move into your masters and become a

1139

00:47:39,839 --> 00:47:37,569

registered Midwife jewelers they

1140

00:47:42,390 --> 00:47:39,849

actually they don't have a registration

1141

00:47:45,690 --> 00:47:42,400

process but they actually do a lot of

1142

00:47:47,670 --> 00:47:45,700

research into what woman centered

1143

00:47:50,130 --> 00:47:47,680

practice when women are pregnant and in

1144

00:47:52,980 --> 00:47:50,140

labor and the postnatal time with their

1145

00:47:56,430 --> 00:47:52,990

baby so we actually find the support

1146

00:47:58,470 --> 00:47:56,440

from a doula is very beneficial during

1147

00:48:00,239 --> 00:47:58,480

that time hey why is your favourite bit

1148

00:48:03,809 --> 00:48:00,249

of the science much today was a bit with

1149

00:48:05,609 --> 00:48:03,819

yeah that's right on um well geez I'm

1150

00:48:06,660 --> 00:48:05,619

just so glad to be here too I mean it's

1151  
00:48:08,339 --> 00:48:06,670  
good to see all these people coming out

1152  
00:48:10,349 --> 00:48:08,349  
for it isn't I actually am so surprised

1153  
00:48:13,559 --> 00:48:10,359  
at the number of people and I'm here to

1154  
00:48:15,989 --> 00:48:13,569  
support the science party as well and I

1155  
00:48:18,210 --> 00:48:15,999  
just thought the turnout was for me

1156  
00:48:19,859 --> 00:48:18,220  
coming from travelling by train from the

1157  
00:48:22,440 --> 00:48:19,869  
Central Coast was something like such an

1158  
00:48:25,559 --> 00:48:22,450  
eye opener so it's just nice to see many

1159  
00:48:27,239 --> 00:48:25,569  
people that have the same views as me oh

1160  
00:48:30,269 --> 00:48:27,249  
look get back there and spread the word

1161  
00:48:31,499 --> 00:48:30,279  
round terrigal thank you thank you he

1162  
00:48:32,880 --> 00:48:31,509  
would someone who has a sign that in

1163  
00:48:34,769 --> 00:48:32,890

other years you might thought was an odd

1164

00:48:35,640 --> 00:48:34,779

thing solidarity with us science you

1165

00:48:36,870 --> 00:48:35,650

never thought the one the greatest

1166

00:48:38,670 --> 00:48:36,880

countries in the world would need heap

1167

00:48:40,410 --> 00:48:38,680

with their science but tell her tell us

1168

00:48:42,120 --> 00:48:40,420

what's going wrong with us science these

1169

00:48:43,049 --> 00:48:42,130

are the UN why do these people why do

1170

00:48:45,059 --> 00:48:43,059

they need support they look pretty

1171

00:48:47,249 --> 00:48:45,069

healthy to me he's got a beard that the

1172

00:48:49,200 --> 00:48:47,259

beard count has just gone up by one okay

1173

00:48:51,120 --> 00:48:49,210

yeah what I need help they look okay to

1174

00:48:52,739 --> 00:48:51,130

me so I've come here in solidarity with

1175

00:48:55,559 --> 00:48:52,749

us scientist because I have Trump and

1176

00:48:57,390 --> 00:48:55,569

his administration who really about

1177

00:48:59,759 --> 00:48:57,400

profits and business and themselves they

1178

00:49:02,009 --> 00:48:59,769

don't care about science science makes

1179

00:49:04,979 --> 00:49:02,019

the world go around we watch the video

1180

00:49:06,660 --> 00:49:04,989

through science wifis from science air

1181

00:49:08,400 --> 00:49:06,670

travel has also been informed by science

1182

00:49:12,470 --> 00:49:08,410

I'm an environmental scientist so we

1183

00:49:14,729 --> 00:49:12,480

breathe and understand how how science

1184

00:49:16,529 --> 00:49:14,739

doesn't make the world go round it makes

1185

00:49:19,140 --> 00:49:16,539

you understand how and why the world

1186

00:49:20,880 --> 00:49:19,150

goes round so I've actually come here

1187

00:49:22,289 --> 00:49:20,890

originally to support your scientists

1188

00:49:22,579 --> 00:49:22,299

and then your scientists came up and

1189

00:49:24,380 --> 00:49:22,589

said

1190

00:49:25,609 --> 00:49:24,390

lie to me okay let's grill them okay you

1191

00:49:27,620 --> 00:49:25,619

two what's your what's your speciality

1192

00:49:30,229 --> 00:49:27,630

I'm an archaeologist and I study

1193

00:49:31,969 --> 00:49:30,239

paleontology okay now what do you think

1194

00:49:33,680 --> 00:49:31,979

is the biggest threat to your science in

1195

00:49:36,039 --> 00:49:33,690

your country at the moment you can't

1196

00:49:39,140 --> 00:49:36,049

study the world if there is no earth

1197

00:49:41,809 --> 00:49:39,150

very good boy yeah you can't even study

1198

00:49:44,269 --> 00:49:41,819

old stuff cuz it'll be gone we gone and

1199

00:49:47,059 --> 00:49:44,279

knowing the past allows us to understand

1200

00:49:50,660 --> 00:49:47,069

the future both in Eric okay give us a

1201

00:49:52,279 --> 00:49:50,670

nice wife okay of science marches he

1202

00:49:54,620 --> 00:49:52,289

hello my name's may not how are you hey

1203

00:49:55,969 --> 00:49:54,630

well I'm interested in biology which is

1204

00:49:57,769 --> 00:49:55,979

actually the science of studying baths

1205

00:50:00,019 --> 00:49:57,779

actually and how the bath can be for you

1206

00:50:02,690 --> 00:50:00,029

but what science disciplines you into

1207

00:50:03,559 --> 00:50:02,700

hey yeah environmental science okay and

1208

00:50:05,180 --> 00:50:03,569

what do you think is the biggest threat

1209

00:50:06,680 --> 00:50:05,190

to our bio mill science here in

1210

00:50:12,170 --> 00:50:06,690

Australia and the main reason why you're

1211

00:50:14,180 --> 00:50:12,180

marching hmm biggest threat only lack of

1212

00:50:17,120 --> 00:50:14,190

like education and knowledge like all

1213

00:50:19,130 --> 00:50:17,130

you need is knowledge and awareness and

1214

00:50:20,569 --> 00:50:19,140

once once you know someone tells you

1215

00:50:21,890 --> 00:50:20,579

about any understand what's going on and

1216

00:50:24,049 --> 00:50:21,900

then you can spread that message on to

1217

00:50:25,400 --> 00:50:24,059

everyone everyone knows that like global

1218

00:50:27,650 --> 00:50:25,410

warming is an issue and everything is an

1219

00:50:29,180 --> 00:50:27,660

issue but no one says anything about it

1220

00:50:32,269 --> 00:50:29,190

there's like lack of education lack of

1221

00:50:33,890 --> 00:50:32,279

resource like political and like lack of

1222

00:50:36,289 --> 00:50:33,900

good legislation that sort of backs

1223

00:50:37,849 --> 00:50:36,299

anything up and I don't know yeah it's a

1224

00:50:39,559 --> 00:50:37,859

symbol of your favorite speaker was a

1225

00:50:41,830 --> 00:50:39,569

report made by someone you went yes

1226

00:50:43,800 --> 00:50:41,840

sister yeah

1227

00:50:46,930 --> 00:50:43,810

name and then one of the older lady

1228

00:50:48,630 --> 00:50:46,940

social sciences and like really you hit

1229

00:50:51,490 --> 00:50:48,640

the nail on the head with them no

1230

00:50:52,780 --> 00:50:51,500

messing around she was here talking to

1231

00:50:54,250 --> 00:50:52,790

the boy well thanks for marching for

1232

00:50:58,090 --> 00:50:54,260

science today let's just get a watch a

1233

00:51:00,040 --> 00:50:58,100

look at that there we go lab science and

1234

00:51:02,350 --> 00:51:00,050

here we see some community based at pro

1235

00:51:04,120 --> 00:51:02,360

vaccine appt protesters so to speak with

1236

00:51:06,100 --> 00:51:04,130

the results of that there hello who we

1237

00:51:08,980 --> 00:51:06,110

have here and why did you go with the

1238

00:51:11,770 --> 00:51:08,990

vaccine so as a doctor I can see at

1239

00:51:14,050 --> 00:51:11,780

first hand the necessity of vaccination

1240

00:51:16,480 --> 00:51:14,060

in protecting both our children and also

1241

00:51:19,900 --> 00:51:16,490

the greater community in particular my

1242

00:51:22,300 --> 00:51:19,910

personal passions lie with our antenatal

1243

00:51:24,490 --> 00:51:22,310

vaccination of pregnant women with our

1244

00:51:27,220 --> 00:51:24,500

whooping cough vaccines which has been

1245

00:51:30,040 --> 00:51:27,230

shown unequivocally to improve outcomes

1246

00:51:32,130 --> 00:51:30,050

to baby and also to communities and

1247

00:51:34,690 --> 00:51:32,140

these are my fully vaccinated children

1248

00:51:37,240 --> 00:51:34,700

that I'm protecting them and their

1249

00:51:38,860 --> 00:51:37,250

well-being for years to come now that

1250

00:51:40,060 --> 00:51:38,870

what I ask controversial question cuz me

1251

00:51:41,920 --> 00:51:40,070

not being a doctor I don't quite

1252

00:51:43,810 --> 00:51:41,930

understand that why do we give newborn

1253

00:51:45,160 --> 00:51:43,820

babies a Hep B vaccine I don't quite

1254

00:51:47,890 --> 00:51:45,170

understand that and I'm sure there's a

1255

00:51:51,580 --> 00:51:47,900

good reason for it there is so hepatitis

1256

00:51:53,740 --> 00:51:51,590

B is an endemic er infection in that in

1257

00:51:56,890 --> 00:51:53,750

our community which means that anybody

1258

00:51:58,960 --> 00:51:56,900

can get it at any time okay and it's not

1259

00:52:01,540 --> 00:51:58,970

just from sexual transmission it's from

1260

00:52:03,940 --> 00:52:01,550

transmission of saliva children bite

1261

00:52:06,130 --> 00:52:03,950

each other at daycare they also get

1262

00:52:08,950 --> 00:52:06,140

exposed to it from blood or just from

1263

00:52:10,870 --> 00:52:08,960

interacting with each other um so it's

1264

00:52:13,780 --> 00:52:10,880

really important that we protect against

1265

00:52:15,970 --> 00:52:13,790

this deadly virus that causes commendeth

1266

00:52:18,100 --> 00:52:15,980

illness particularly in Asian countries

1267

00:52:19,569 --> 00:52:18,110

where it's a very high rate of having

1268

00:52:21,549 --> 00:52:19,579

ever titus be

1269

00:52:23,440 --> 00:52:21,559

so it's really important we can protect

1270

00:52:25,509 --> 00:52:23,450

them as early as we possibly can from

1271

00:52:27,099 --> 00:52:25,519

this terrible disease see that's the

1272

00:52:28,779 --> 00:52:27,109

explanation I've wanted for years not

1273

00:52:30,819 --> 00:52:28,789

far I had to come to a match to find a

1274

00:52:32,019 --> 00:52:30,829

doctor I should just ask my GP there now

1275

00:52:34,479 --> 00:52:32,029

what do you think it's the big big

1276

00:52:36,219 --> 00:52:34,489

threat like the anti-vaxxers is a lot of

1277

00:52:37,989 --> 00:52:36,229

people are suspicious of vaccines

1278

00:52:39,719 --> 00:52:37,999

because maybe that they're bit worried

1279

00:52:42,759 --> 00:52:39,729

about it aren't they there is

1280

00:52:44,979 --> 00:52:42,769

unequivocal unequivocal safety evidence

1281

00:52:47,559 --> 00:52:44,989

of the benefit of vaccination for

1282

00:52:50,440 --> 00:52:47,569

ourselves and for the community there is

1283

00:52:53,199 --> 00:52:50,450

no evidence whatsoever that vaccination

1284

00:52:57,940 --> 00:52:53,209

causes autism and I think it's really um

1285

00:53:00,969 --> 00:52:57,950

a ton it's not a community feeling to

1286

00:53:02,949 --> 00:53:00,979

notch promote vaccination which is so

1287

00:53:04,539 --> 00:53:02,959

important in keeping all of us healthy I

1288

00:53:06,969 --> 00:53:04,549

mean among this crowd there would be

1289

00:53:09,249 --> 00:53:06,979

people who might have cancer or young

1290

00:53:11,170 --> 00:53:09,259

children who can't be vaccinated it is

1291

00:53:13,420 --> 00:53:11,180

our responsibility to ensure their

1292

00:53:17,440 --> 00:53:13,430

safety and you enjoy being in the match

1293

00:53:22,329 --> 00:53:17,450

today yes I did and did you enjoy your

1294

00:53:23,559 --> 00:53:22,339

marching did you just say any more than

1295

00:53:25,809 --> 00:53:23,569

that unless I can speak to a press agent

1296

00:53:27,519 --> 00:53:25,819

I do understand that okay thank you so

1297

00:53:30,090 --> 00:53:27,529

much thank you thank you very much thank

1298

00:53:30,090 --> 00:53:30,100

you thank you

1299

00:53:34,780 --> 00:53:32,920

may not here at the match for science

1300

00:53:36,700 --> 00:53:34,790

just a bit of an update on the neckbeard

1301  
00:53:38,560 --> 00:53:36,710  
count I've been checking throughout the

1302  
00:53:39,880 --> 00:53:38,570  
crowd and I do have to say that the

1303  
00:53:41,620 --> 00:53:39,890  
despite the thousands of people here

1304  
00:53:42,940 --> 00:53:41,630  
there's been a distinct lack of neck

1305  
00:53:45,490 --> 00:53:42,950  
beards I've been doing a neckbeard

1306  
00:53:46,690 --> 00:53:45,500  
account and not one oh look a rugged

1307  
00:53:48,820 --> 00:53:46,700  
Iran's again look you do have a

1308  
00:53:50,440 --> 00:53:48,830  
neckbeard but I mainly don't know I mean

1309  
00:53:52,360 --> 00:53:50,450  
just just the beard that's on the neck

1310  
00:53:54,040 --> 00:53:52,370  
of the potential of make beer I cannot

1311  
00:53:56,050 --> 00:53:54,050  
see anyone with a neckbeard I'm a bit

1312  
00:53:58,270 --> 00:53:56,060  
disappointed I thought we'd get one no

1313  
00:54:00,670 --> 00:53:58,280

well I'm I apologize on behalf of all

1314

00:54:02,650 --> 00:54:00,680

potential neck beards for actually you

1315

00:54:04,480 --> 00:54:02,660

know trimming and looking I was

1316

00:54:06,220 --> 00:54:04,490

expecting a lot nerdy now I was

1317

00:54:07,720 --> 00:54:06,230

expecting speaking nerds I'll suspect me

1318

00:54:09,430 --> 00:54:07,730

with some more hairy high pants to us

1319

00:54:11,170 --> 00:54:09,440

expecting some that high waisted built

1320

00:54:13,810 --> 00:54:11,180

at action none of that either oh there's

1321

00:54:16,090 --> 00:54:13,820

also a distinct lat absence of Bo I know

1322

00:54:17,680 --> 00:54:16,100

it's not it's not not a site at science

1323

00:54:19,810 --> 00:54:17,690

is not what it used to be that's wrong

1324

00:54:21,250 --> 00:54:19,820

everyone's brushing their teeth and

1325

00:54:24,640 --> 00:54:21,260

using deodorant what's going on in the

1326

00:54:27,010 --> 00:54:24,650

world I blame Trump I blame him too hi

1327

00:54:28,120 --> 00:54:27,020

I'm a nod from skipping down higher now

1328

00:54:29,530 --> 00:54:28,130

I'm we're actually with someone here

1329

00:54:31,360 --> 00:54:29,540

they've got your climate science 101

1330

00:54:32,860 --> 00:54:31,370

you've got the five major points on a

1331

00:54:34,750 --> 00:54:32,870

board that could save me four years at

1332

00:54:36,730 --> 00:54:34,760

University exactly well I've done those

1333

00:54:39,280 --> 00:54:36,740

boys at university so I can tell you a

1334

00:54:40,540 --> 00:54:39,290

little bit about it yeah I know it is it

1335

00:54:41,740 --> 00:54:40,550

so it is a lot more than those five

1336

00:54:43,390 --> 00:54:41,750

points is I should have a little

1337

00:54:45,430 --> 00:54:43,400

asterisks is over the it's warming

1338

00:54:47,410 --> 00:54:45,440

because it's also cool way mm-hmm what

1339

00:54:49,030 --> 00:54:47,420

was your thesis on well I'm just

1340

00:54:51,670 --> 00:54:49,040

finishing my undergrad right now all ok

1341

00:54:52,780 --> 00:54:51,680

I'm sorry thesis coming next ok can you

1342

00:54:54,580 --> 00:54:52,790

give us a hint what it is all that give

1343

00:54:56,320 --> 00:54:54,590

it away and someone else to do it don't

1344

00:54:57,850 --> 00:54:56,330

actually know yet but definitely thought

1345

00:55:00,040 --> 00:54:57,860

she knows you know she knows exactly

1346

00:55:03,040 --> 00:55:00,050

it's just so good that someone will copy

1347

00:55:05,110 --> 00:55:03,050

it maybe you never know now how do you

1348

00:55:06,400 --> 00:55:05,120

feel about the issue of women in science

1349

00:55:08,530 --> 00:55:06,410

and promoting and getting more women

1350

00:55:10,660 --> 00:55:08,540

involved in science is it as simple as

1351  
00:55:11,680 --> 00:55:10,670  
just promoting it or what do you think

1352  
00:55:14,140 --> 00:55:11,690  
is the key to getting more women

1353  
00:55:16,360 --> 00:55:14,150  
involved it's me it's it's a very

1354  
00:55:18,670 --> 00:55:16,370  
involved topic because while there are a

1355  
00:55:20,770 --> 00:55:18,680  
lot of women going into bachelor of

1356  
00:55:23,710 --> 00:55:20,780  
science not so much in physics and

1357  
00:55:26,250 --> 00:55:23,720  
engineering the issue is post-graduation

1358  
00:55:28,300 --> 00:55:26,260  
getting women jobs in science in a post

1359  
00:55:30,070 --> 00:55:28,310  
postgraduate role or actually in the

1360  
00:55:31,920 --> 00:55:30,080  
industry that's why really have a

1361  
00:55:34,350 --> 00:55:31,930  
decrease in the amount of women and

1362  
00:55:36,240 --> 00:55:34,360  
industry that a general lack of job or

1363  
00:55:38,580 --> 00:55:36,250

is it more like the boys club hire other

1364

00:55:40,530 --> 00:55:38,590

boys there is a bit of boys club from my

1365

00:55:42,600 --> 00:55:40,540

conversations with industry career

1366

00:55:45,810 --> 00:55:42,610

scientists who are women there is a bit

1367

00:55:48,120 --> 00:55:45,820

of boys club but that's also it's it's a

1368

00:55:49,650 --> 00:55:48,130

lot larger with just women in careers as

1369

00:55:52,280 --> 00:55:49,660

well you know thinking about maternity

1370

00:55:54,510 --> 00:55:52,290

leave taking that break getting those

1371

00:55:56,790 --> 00:55:54,520

opportunities that made available to you

1372

00:55:59,250 --> 00:55:56,800

so I'm which universities you go to I

1373

00:56:01,950 --> 00:55:59,260

member Corey okay and why did you choose

1374

00:56:03,660 --> 00:56:01,960

the science you chose I've been

1375

00:56:05,760 --> 00:56:03,670

passionate about climate science since I

1376

00:56:09,120 --> 00:56:05,770

was very little and I always knew that I

1377

00:56:11,430 --> 00:56:09,130

wanted to do it I'm studying a 2 degrees

1378

00:56:13,380 --> 00:56:11,440

to majors in science in con science and

1379

00:56:16,560 --> 00:56:13,390

chemistry because I wanted to study the

1380

00:56:18,750 --> 00:56:16,570

interplay of atmospheric chemistry ok so

1381

00:56:22,280 --> 00:56:18,760

you must get particularly angry when

1382

00:56:24,780 --> 00:56:22,290

people deny global warming Christ yes

1383

00:56:26,190 --> 00:56:24,790

what do you yell at the television is

1384

00:56:27,450 --> 00:56:26,200

there some simple thing you yell at the

1385

00:56:30,780 --> 00:56:27,460

television when that's on you got no

1386

00:56:34,950 --> 00:56:30,790

it's just read the summary for

1387

00:56:37,770 --> 00:56:34,960

policymakers it's if you deny an

1388

00:56:42,330 --> 00:56:37,780

overwhelming consensus of scientists

1389

00:56:45,420 --> 00:56:42,340

have you not learned to read it it's

1390

00:56:47,660 --> 00:56:45,430

really fury ating thank you very much no

1391

00:56:49,680 --> 00:56:47,670

worries thanks for your time thank you

1392

00:56:50,790 --> 00:56:49,690

guess I'm getting a couple hear from

1393

00:56:52,530 --> 00:56:50,800

everyone because science is all about

1394

00:56:55,170 --> 00:56:52,540

cuddling now what did you make it the

1395

00:56:57,690 --> 00:56:55,180

whole thing Jessica I was great fun very

1396

00:56:59,400 --> 00:56:57,700

inspiring great speakers lots of police

1397

00:57:01,290 --> 00:56:59,410

to protect the public from those

1398

00:57:03,120 --> 00:57:01,300

dangerous dangerous scientists I

1399

00:57:05,190 --> 00:57:03,130

Canada's highs 15 which as high as i can

1400

00:57:07,560 --> 00:57:05,200

count Laura would you make of it I was

1401  
00:57:09,720 --> 00:57:07,570  
great there was at least 15 yes at least

1402  
00:57:11,220 --> 00:57:09,730  
50 big turned out by the police their

1403  
00:57:12,810 --> 00:57:11,230  
time and a half two on a sad day as well

1404  
00:57:14,850 --> 00:57:12,820  
Tim would you wreck of the whole March

1405  
00:57:16,800 --> 00:57:14,860  
what was your favourite bit ah the lack

1406  
00:57:18,030 --> 00:57:16,810  
of violence that's true yeah they're all

1407  
00:57:20,880 --> 00:57:18,040  
friendly Bunch no violence for a

1408  
00:57:23,040 --> 00:57:20,890  
demonstration yeah and Olivia I like

1409  
00:57:24,990 --> 00:57:23,050  
really loving the cosplay around no

1410  
00:57:26,760 --> 00:57:25,000  
captain planet earlier today there is

1411  
00:57:28,770 --> 00:57:26,770  
some cool cosplay going on at a science

1412  
00:57:29,910 --> 00:57:28,780  
much what you'd expect and Iran you were

1413  
00:57:31,410 --> 00:57:29,920

getting out and about the crowd there

1414

00:57:33,420 --> 00:57:31,420

what do you reckon I think it's been

1415

00:57:35,100 --> 00:57:33,430

great there's so many people who support

1416

00:57:38,520 --> 00:57:35,110

science it's just wonderful to see the

1417

00:57:40,410 --> 00:57:38,530

great turnout and it's been fun as well

1418

00:57:42,180 --> 00:57:40,420

you know I expected to be a little bit

1419

00:57:44,100 --> 00:57:42,190

more serious and it turned out to be

1420

00:57:45,390 --> 00:57:44,110

really great fun thought science could

1421

00:57:52,040 --> 00:57:45,400

be Sun so to Ray from

1422

00:57:52,050 --> 00:58:06,430

[Music]

1423

00:58:10,849 --> 00:58:09,109

astronomy cast takes a fax based journey

1424

00:58:12,559 --> 00:58:10,859

through the cosmos as it offers

1425

00:58:15,259 --> 00:58:12,569

listeners weekly discussions on

1426  
00:58:18,109 --> 00:58:15,269  
astronomical topics ranging from planets

1427  
00:58:20,449 --> 00:58:18,119  
to cosmology hosted by Fraser Cain of

1428  
00:58:21,469 --> 00:58:20,459  
Universe Today and myself dr. Pamela

1429  
00:58:24,140 --> 00:58:21,479  
gave southern illinois university

1430  
00:58:25,999 --> 00:58:24,150  
edwardsville this show brings the

1431  
00:58:28,459 --> 00:58:26,009  
questions of an avid astronomy lover

1432  
00:58:30,529 --> 00:58:28,469  
directly to an astronomer together

1433  
00:58:32,089 --> 00:58:30,539  
Fraser and I explore what is known and

1434  
00:58:34,819 --> 00:58:32,099  
being discovered about the universe

1435  
00:58:36,920 --> 00:58:34,829  
around us join us each week as we take a

1436  
00:58:39,090 --> 00:58:36,930  
fact space journey through the cosmos at

1437  
00:58:52,770 --> 00:58:39,100  
astronomy cast calm

1438  
00:58:57,700 --> 00:58:55,600

alright we're recording hi Richard

1439

00:59:00,430 --> 00:58:57,710

Richard this is Angie and Celeste I'm

1440

00:59:02,380 --> 00:59:00,440

Celeste this is Angie hi Richard we're

1441

00:59:09,670 --> 00:59:02,390

at the science March live in Washington

1442

00:59:11,830 --> 00:59:09,680

DC hey everybody see how Australia that

1443

00:59:14,980 --> 00:59:11,840

is a bunch of science minded people and

1444

00:59:16,330 --> 00:59:14,990

scientists we have just reached this to

1445

00:59:18,730 --> 00:59:16,340

we've we've gotten as close as you can

1446

00:59:20,770 --> 00:59:18,740

to the steps of the Capitol and it was

1447

00:59:22,240 --> 00:59:20,780

an amazing March I mean it was mostly we

1448

00:59:24,280 --> 00:59:22,250

were standing at first but then we were

1449

00:59:27,160 --> 00:59:24,290

able to move on and the people here have

1450

00:59:30,490 --> 00:59:27,170

been so enthusiastic and so creative in

1451  
00:59:32,290 --> 00:59:30,500  
their size have enough congratula Tory

1452  
00:59:36,280 --> 00:59:32,300  
agreed agreed yeah there was a lot of

1453  
00:59:38,080 --> 00:59:36,290  
fun so um it was very wet report on us

1454  
00:59:40,720 --> 00:59:38,090  
the whole time but we scientists knew it

1455  
00:59:43,840 --> 00:59:40,730  
was going to happen so we brought rain

1456  
00:59:46,360 --> 00:59:43,850  
gear umbrellas and we were prepared yes

1457  
00:59:47,620 --> 00:59:46,370  
and it's amazing how science helped just

1458  
00:59:50,820 --> 00:59:47,630  
predict this rain so we have people with

1459  
00:59:53,340 --> 00:59:50,830  
laminated signs some wonderful wonderful

1460  
00:59:57,460 --> 00:59:53,350  
clever slogans we saw Donald Trump

1461  
00:59:59,260 --> 00:59:57,470  
depicted as a virus ha we thought many

1462  
01:00:01,060 --> 00:59:59,270  
good slogans and there are many good

1463  
01:00:01,960 --> 01:00:01,070

chance and it's super loud out here so

1464

01:00:04,390 --> 01:00:01,970

we don't even know if you're gonna be

1465

01:00:06,610 --> 01:00:04,400

able to hear us very well so we're going

1466

01:00:09,430 --> 01:00:06,620

to record some more thoughts later it's

1467

01:00:11,050 --> 01:00:09,440

certainly a varied crowd with not so

1468

01:00:13,150 --> 01:00:11,060

much a singular message but a strong

1469

01:00:18,370 --> 01:00:13,160

message so we're hoping it makes it a

1470

01:00:21,550 --> 01:00:18,380

dent all right talk to you soon hello we

1471

01:00:24,280 --> 01:00:21,560

are live from America in Washington DC I

1472

01:00:28,030 --> 01:00:24,290

have with me here this is celestia ward

1473

01:00:30,430 --> 01:00:28,040

a fantastic cartoonist who has done an

1474

01:00:33,220 --> 01:00:30,440

outstanding job today of reporting on

1475

01:00:36,850 --> 01:00:33,230

the march in washington and i'm here

1476

01:00:40,450 --> 01:00:36,860

with angie matki ER doctor and science

1477

01:00:43,540 --> 01:00:40,460

enthusiast extraordinaire who has done a

1478

01:00:45,820 --> 01:00:43,550

wonderful job marching up and down the

1479

01:00:48,790 --> 01:00:45,830

streets of Washington DC with me and

1480

01:00:50,560 --> 01:00:48,800

pointing out some amazing signs and we

1481

01:00:54,340 --> 01:00:50,570

have had a wonderful time and we are so

1482

01:00:56,710 --> 01:00:54,350

exhausted Richard Saunders I even tell

1483

01:00:59,140 --> 01:00:56,720

you how exhausted we are we are we want

1484

01:01:00,970 --> 01:00:59,150

to give you an encapsulated view of what

1485

01:01:03,280 --> 01:01:00,980

happened today on the science march in

1486

01:01:05,250 --> 01:01:03,290

America the one in DC there were so many

1487

01:01:07,260 --> 01:01:05,260

across the country but we were we were

1488

01:01:09,810 --> 01:01:07,270

at the the nation's capital Washington

1489

01:01:12,000 --> 01:01:09,820

DC marching towards the Capitol building

1490

01:01:15,000 --> 01:01:12,010

with all of our signs and there were

1491

01:01:18,470 --> 01:01:15,010

even despite the rain there were tons of

1492

01:01:21,150 --> 01:01:18,480

people a sea of umbrellas a sea of

1493

01:01:22,650 --> 01:01:21,160

people chanting things I heard we had

1494

01:01:27,180 --> 01:01:22,660

some great chance out there they had

1495

01:01:29,580 --> 01:01:27,190

like Oh what was your favorite one angie

1496

01:01:31,580 --> 01:01:29,590

as far as the chance are the songs the

1497

01:01:34,800 --> 01:01:31,590

chance i think one of my favorites was

1498

01:01:38,460 --> 01:01:34,810

what do we want science when do we want

1499

01:01:40,410 --> 01:01:38,470

it after peer review yes i think that

1500

01:01:42,150 --> 01:01:40,420

was my favorite chant yeah that makes

1501

01:01:43,980 --> 01:01:42,160

sense all right well so we have had a

1502

01:01:46,860 --> 01:01:43,990

terrific day we are chilled to the bone

1503

01:01:50,070 --> 01:01:46,870

but we had a fantastic day we have been

1504

01:01:53,730 --> 01:01:50,080

warmed by the loving thoughts and the

1505

01:01:56,580 --> 01:01:53,740

warm wishes of all of our co marchers it

1506

01:01:58,290 --> 01:01:56,590

has been a fantastic there's yeah

1507

01:02:01,800 --> 01:01:58,300

there's a lot of love there really was

1508

01:02:04,920 --> 01:02:01,810

and it was very well organized group and

1509

01:02:06,870 --> 01:02:04,930

it was huge we were probably about a

1510

01:02:09,390 --> 01:02:06,880

quarter of the way back into the pack

1511

01:02:12,450 --> 01:02:09,400

and then even after we had finished our

1512

01:02:14,010 --> 01:02:12,460

march we as we walked back there were

1513

01:02:17,250 --> 01:02:14,020

still hundreds of thousands of people

1514

01:02:19,410 --> 01:02:17,260

still walking it was amazing to see that

1515

01:02:22,020 --> 01:02:19,420

many people turned out to support

1516

01:02:23,760 --> 01:02:22,030

science people who had never done

1517

01:02:26,280 --> 01:02:23,770

anything like this in their entire lives

1518

01:02:27,900 --> 01:02:26,290

were here in Washington DC and had

1519

01:02:29,070 --> 01:02:27,910

traveled a long way to do it hey I've

1520

01:02:30,840 --> 01:02:29,080

heard a lot of back and forth about

1521

01:02:32,850 --> 01:02:30,850

whether or not this this March was a

1522

01:02:34,620 --> 01:02:32,860

good idea mm-hmm I've heard scientists

1523

01:02:37,050 --> 01:02:34,630

say that you know I'm not participating

1524

01:02:38,070 --> 01:02:37,060

because blah blah blah well mostly that

1525

01:02:40,020 --> 01:02:38,080

I think was that they didn't want

1526

01:02:42,270 --> 01:02:40,030

science to be politicized yes but

1527

01:02:44,100 --> 01:02:42,280

unfortunately I think that it already is

1528

01:02:46,590 --> 01:02:44,110

politicized and people are making

1529

01:02:48,570 --> 01:02:46,600

decisions based on their beliefs rather

1530

01:02:50,970 --> 01:02:48,580

than the actual data yes and they're

1531

01:02:52,440 --> 01:02:50,980

they're starting to throw out to the

1532

01:02:55,380 --> 01:02:52,450

general public that you shouldn't trust

1533

01:02:57,270 --> 01:02:55,390

science and that's a dangerous dangerous

1534

01:02:58,620 --> 01:02:57,280

thing and when you see something

1535

01:03:00,600 --> 01:02:58,630

dangerous happen you want to do

1536

01:03:02,700 --> 01:03:00,610

something about it it's important for me

1537

01:03:05,430 --> 01:03:02,710

to feel like I've made a statement yeah

1538

01:03:07,950 --> 01:03:05,440

by being here I feel like I have done my

1539

01:03:11,070 --> 01:03:07,960

at least part of my civic duty by

1540

01:03:14,100 --> 01:03:11,080

showing up yeah and yes and we had many

1541

01:03:15,120 --> 01:03:14,110

it was very multidisciplinary we had so

1542

01:03:17,430 --> 01:03:15,130

many different people from so many

1543

01:03:18,720 --> 01:03:17,440

different areas of science and we were

1544

01:03:21,530 --> 01:03:18,730

marching in the section with

1545

01:03:24,930 --> 01:03:21,540

which was the secular coalition we had

1546

01:03:27,270 --> 01:03:24,940

atheists and agnostics and humanists

1547

01:03:28,620 --> 01:03:27,280

humanists and many different groups then

1548

01:03:30,060 --> 01:03:28,630

the Center for inquiry had a

1549

01:03:31,590 --> 01:03:30,070

representation there there were

1550

01:03:34,620 --> 01:03:31,600

co-sponsors in the March as a matter of

1551

01:03:37,410 --> 01:03:34,630

fact Lucas and I was here we got two

1552

01:03:40,200 --> 01:03:37,420

here Bill Nye oh and oh did you hear

1553

01:03:44,160 --> 01:03:40,210

that our pizza has arrived pizza we

1554

01:03:46,260 --> 01:03:44,170

ordered room service pizza if we are

1555

01:03:51,300 --> 01:03:46,270

getting the whole experience here as as

1556

01:03:53,970 --> 01:03:51,310

we as we uh as we recuperate from the

1557

01:03:56,430 --> 01:03:53,980

March I think I walked about seven and a

1558

01:03:58,920 --> 01:03:56,440

half miles today you did I may come over

1559

01:04:01,650 --> 01:03:58,930

that I became probably close to eight

1560

01:04:04,859 --> 01:04:01,660

yeah we're we were able to track how far

1561

01:04:06,630 --> 01:04:04,869

we walked thanks to science and our

1562

01:04:09,540 --> 01:04:06,640

little built-in pedometers that's right

1563

01:04:11,910 --> 01:04:09,550

this is technology or yes with art with

1564

01:04:14,820 --> 01:04:11,920

her smartphones yep this is technology

1565

01:04:17,190 --> 01:04:14,830

orc it's very important anyway another

1566

01:04:19,980 --> 01:04:17,200

skeptic concern about the March is that

1567

01:04:21,420 --> 01:04:19,990

there have been a number of different

1568

01:04:23,400 --> 01:04:21,430

groups that have kind of jumped on the

1569

01:04:26,190 --> 01:04:23,410

bandwagon including some pseudo science

1570

01:04:27,750 --> 01:04:26,200

group we had some anti GMO people I

1571

01:04:30,870 --> 01:04:27,760

heard you know because there was a big

1572

01:04:32,640 --> 01:04:30,880

environmental contingent many people

1573

01:04:34,950 --> 01:04:32,650

were holding up Earth Day signs it did

1574

01:04:37,859 --> 01:04:34,960

take place on earth day and you know we

1575

01:04:39,450 --> 01:04:37,869

love mother earth and I'm with her with

1576

01:04:41,609 --> 01:04:39,460

a little arrow to the earth sign and

1577

01:04:44,040 --> 01:04:41,619

that's wonderful we love the earth

1578

01:04:45,750 --> 01:04:44,050

people we love the hippies but some of

1579

01:04:47,849 --> 01:04:45,760

them aren't necessarily grounded in real

1580

01:04:49,980 --> 01:04:47,859

sciences so there's a lot of concerns

1581

01:04:51,930 --> 01:04:49,990

that skeptics have with that contingent

1582

01:04:54,240 --> 01:04:51,940

agreed yeah in fact there was even an

1583

01:04:58,070 --> 01:04:54,250

ant I've axe or that was in the group

1584

01:05:01,320 --> 01:04:58,080

that we were with and he would yell an

1585

01:05:04,380 --> 01:05:01,330

advertisement for a particular website

1586

01:05:06,120 --> 01:05:04,390

yet bonded him in the wild it was pretty

1587

01:05:10,050 --> 01:05:06,130

funny well we were chanting everybody

1588

01:05:12,780 --> 01:05:10,060

was chanting a you know 1 2 3 4 climate

1589

01:05:15,060 --> 01:05:12,790

was changing as our door five six seven

1590

01:05:16,890 --> 01:05:15,070

eight everybody vaccinated and then

1591

01:05:20,930 --> 01:05:16,900

after that shan't ended you heard this

1592

01:05:24,990 --> 01:05:20,940

one old coot out there just kind of go

1593

01:05:27,330 --> 01:05:25,000

search out vaccine fraud search vaccine

1594

01:05:29,640 --> 01:05:27,340

fraud well anyways and yeah he was

1595

01:05:31,320 --> 01:05:29,650

clearly he was clearly a lone wolf in

1596

01:05:32,160 --> 01:05:31,330

the whole pack of science minded people

1597

01:05:34,589 --> 01:05:32,170

and everybody kind of looked

1598

01:05:36,030 --> 01:05:34,599

each other this whole March is an

1599

01:05:37,440 --> 01:05:36,040

experiment we're going to see what

1600

01:05:39,930 --> 01:05:37,450

happens we're going to see if people who

1601  
01:05:43,319 --> 01:05:39,940  
weren't politically motivated before who

1602  
01:05:45,180 --> 01:05:43,329  
didn't really participate in the public

1603  
01:05:47,730 --> 01:05:45,190  
sphere which a lot of scientists don't

1604  
01:05:49,799 --> 01:05:47,740  
we'll see if this is sort of that first

1605  
01:05:52,829 --> 01:05:49,809  
little you know dipping their toes in

1606  
01:05:55,500 --> 01:05:52,839  
the pool also see if it gets things

1607  
01:05:57,329 --> 01:05:55,510  
rolling and we can maybe maybe making a

1608  
01:05:58,859 --> 01:05:57,339  
difference yeah he dislodged some of the

1609  
01:06:01,079 --> 01:05:58,869  
apathy that we've seen among the

1610  
01:06:04,020 --> 01:06:01,089  
electorate here yeah i really hope is

1611  
01:06:05,849 --> 01:06:04,030  
that happen because apathy among apathy

1612  
01:06:08,370 --> 01:06:05,859  
among the scientifically literate has

1613  
01:06:10,440 --> 01:06:08,380

been very dangerous and in the course of

1614

01:06:12,480 --> 01:06:10,450

America how great if those who know

1615

01:06:14,120 --> 01:06:12,490

better don't speak up then then that

1616

01:06:16,710 --> 01:06:14,130

leaves those who don't know any better

1617

01:06:18,299 --> 01:06:16,720

they're in charge yeah we don't want let

1618

01:06:20,099 --> 01:06:18,309

any way not at all thank you so much

1619

01:06:22,260 --> 01:06:20,109

richer alright we hope Sydney was a

1620

01:06:24,270 --> 01:06:22,270

wonderful success and take care of we'll

1621

01:06:39,739 --> 01:06:24,280

hear you later okay bye

1622

01:06:44,819 --> 01:06:42,569

thank you for listening to the skeptic

1623

01:06:47,160 --> 01:06:44,829

zone and thank you very much to Angie

1624

01:06:51,569 --> 01:06:47,170

and Celeste all the way over there and

1625

01:06:53,789 --> 01:06:51,579

in Washington DC for taking the time to

1626  
01:06:57,059 --> 01:06:53,799  
make recordings and sending them to me

1627  
01:06:59,189 --> 01:06:57,069  
so we could all enjoy their take on the

1628  
01:07:00,539 --> 01:06:59,199  
march for science in that part of the

1629  
01:07:04,499 --> 01:07:00,549  
world and thank you to all the people

1630  
01:07:06,179 --> 01:07:04,509  
that were interviewed by maenad we

1631  
01:07:08,969 --> 01:07:06,189  
really appreciate that and yes don't

1632  
01:07:11,759 --> 01:07:08,979  
forget pretty soon we'll have the video

1633  
01:07:15,089 --> 01:07:11,769  
of all that adventure up and you can see

1634  
01:07:17,130 --> 01:07:15,099  
Maynard in action on next week's show we

1635  
01:07:19,559 --> 01:07:17,140  
catch up with Maynard again and Tim

1636  
01:07:22,349 --> 01:07:19,569  
Ferguson from Planet Maynard podcast

1637  
01:07:23,849 --> 01:07:22,359  
bunga bunga and he's going to just fill

1638  
01:07:26,160 --> 01:07:23,859

us in on what he's been up to since

1639

01:07:27,989 --> 01:07:26,170

winning the podcast award a couple of

1640

01:07:30,509 --> 01:07:27,999

weeks ago and that's still very exciting

1641

01:07:31,979 --> 01:07:30,519

but since this has been a bumper episode

1642

01:07:35,309 --> 01:07:31,989

of the skeptics own it's time for me to

1643

01:07:37,079 --> 01:07:35,319

lie down yes I'm going to lie down shut

1644

01:07:40,799 --> 01:07:37,089

the door so the cats don't come in and

1645

01:07:43,049 --> 01:07:40,809

decide to sit on me and start they get

1646

01:07:46,229 --> 01:07:43,059

that little claw comes out halfway

1647

01:07:49,769 --> 01:07:46,239

through tonight and beak mmm cat owners

1648

01:07:52,049 --> 01:07:49,779

and know what I mean yes it's time for

1649

01:07:53,669 --> 01:07:52,059

me to have a rest rest up a few days and

1650

01:07:56,160 --> 01:07:53,679

then get ready for the next episode of

1651  
01:07:58,259 --> 01:07:56,170  
the skeptic zone so no matter where you

1652  
01:07:59,939 --> 01:07:58,269  
are listening to the show from around

1653  
01:08:02,549 --> 01:07:59,949  
the world thank you very much for doing

1654  
01:08:06,029 --> 01:08:02,559  
that get listeners in Portugal it's

1655  
01:08:08,719 --> 01:08:06,039  
really great and Norway of course and

1656  
01:08:11,099 --> 01:08:08,729  
Finland many places around the world

1657  
01:08:13,019 --> 01:08:11,109  
anyway for this week this is Richard

1658  
01:08:19,470 --> 01:08:13,029  
Saunders signing off from Sydney

1659  
01:08:21,479 --> 01:08:19,480  
Australia you've been listening to the

1660  
01:08:25,019 --> 01:08:21,489  
skeptics own podcast because of our

1661  
01:08:27,599 --> 01:08:25,029  
website at wwc a petting zoo TV for

1662  
01:08:31,680 --> 01:08:27,609  
contacts an archive of all episodes

1663  
01:08:33,809 --> 01:08:31,690

since 2008 and our online store please

1664

01:08:37,140 --> 01:08:33,819

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1665

01:08:40,129 --> 01:08:37,150

on twitter at skeptic zone liking us on

1666

01:08:42,510 --> 01:08:40,139

facebook and leaving a review on iTunes

1667

01:08:45,180 --> 01:08:42,520

you can also show your support by

1668

01:08:47,190 --> 01:08:45,190

subscribing via paypal for as little as

1669

01:08:49,560 --> 01:08:47,200

99 cents a week

1670

01:08:51,210 --> 01:08:49,570

the skeptic zone is an independent

1671

01:08:53,670 --> 01:08:51,220

production the views and opinions

1672

01:08:55,260 --> 01:08:53,680

expressed on the skeptic zone and not

1673

01:08:58,110 --> 01:08:55,270

necessarily those of Australian