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Show 513

THE
**SKEPTIC
ZONE**
PODCAST

www.skepticzone.tv

19 August 2018



Kate Browne
from the Checkout and CHOICE

Dr Karl - Catherine Polcz - Maynard

Alethea Dean
News about Skepticon 2018

Speed Meet a Scientist #1
National Science Week

Mrs Mac and Morse Code



1
00:00:09,080 --> 00:00:05,920

[Music]

2
00:00:11,840 --> 00:00:09,090

welcome to the skeptic zone the podcast

3
00:00:13,890 --> 00:00:11,850

from Australia for science and reason

4
00:00:16,880 --> 00:00:13,900

[Music]

5
00:00:22,830 --> 00:00:16,890

[Applause]

6
00:00:25,300 --> 00:00:22,840

[Music]

7
00:00:29,109 --> 00:00:25,310

yes it's the skeptic zone podcast

8
00:00:33,340 --> 00:00:29,119

episode number 513 for the 19th of

9
00:00:34,960 --> 00:00:33,350

August 2018 it's not the numerology

10
00:00:36,790 --> 00:00:34,970

podcast although with all those numbers

11
00:00:39,220 --> 00:00:36,800

richardsaunders here with you from

12
00:00:41,580 --> 00:00:39,230

Sydney Australia coming off the back of

13
00:00:45,160 --> 00:00:41,590

two weeks of wonderful science at

14

00:00:47,619 --> 00:00:45,170

science Week which really lasted for two

15

00:00:50,520 --> 00:00:47,629

weeks so on this week's episode of the

16

00:00:52,780 --> 00:00:50,530

skeptics only Lots from science week

17

00:00:55,240 --> 00:00:52,790

however we're gonna kick off with an

18

00:00:57,970 --> 00:00:55,250

interview with Kate brown now Kate Brown

19

00:01:01,000 --> 00:00:57,980

known to many Australians as the guilty

20

00:01:02,860 --> 00:01:01,010

mum from ABC's checkout program he is

21

00:01:05,590 --> 00:01:02,870

also going to be the emcee for this

22

00:01:07,600 --> 00:01:05,600

year's skeptic on in October here in

23

00:01:09,870 --> 00:01:07,610

Sydney in Chatswood I caught up with

24

00:01:12,490 --> 00:01:09,880

Kate Brown a couple of days ago and she

25

00:01:15,460 --> 00:01:12,500

tells us all about her other work at

26
00:01:18,630 --> 00:01:15,470
choice magazine and also about her time

27
00:01:22,270 --> 00:01:18,640
at the checkout Consumer Affairs and

28
00:01:25,209 --> 00:01:22,280
skepticism following that it's part two

29
00:01:27,819 --> 00:01:25,219
of Maynard's spooky action at the

30
00:01:29,830 --> 00:01:27,829
Australian Museum where maenad was

31
00:01:32,170 --> 00:01:29,840
running around meeting and interviewing

32
00:01:35,859 --> 00:01:32,180
all sorts of scientists and interesting

33
00:01:39,760 --> 00:01:35,869
people this week dr. Carol chrysalis key

34
00:01:42,039 --> 00:01:39,770
part - good sir there's never enough

35
00:01:43,929 --> 00:01:42,049
time with dr. Karl cross on whiskey part

36
00:01:46,120 --> 00:01:43,939
2 of maynard's interview of dr. Karl

37
00:01:48,940 --> 00:01:46,130
followed by an interview with Katherine

38
00:01:52,149 --> 00:01:48,950

poults who was the program producer for

39

00:01:54,429 --> 00:01:52,159

the Sydney Science Festival and next

40

00:01:56,429 --> 00:01:54,439

week even more interviews from the

41

00:01:59,200 --> 00:01:56,439

launch of Science Week with Maynard

42

00:02:01,359 --> 00:01:59,210

following that I chat to Alethea Dean

43

00:02:02,950 --> 00:02:01,369

from the Australian skeptics who's going

44

00:02:05,800 --> 00:02:02,960

to be filling us in on more details

45

00:02:08,770 --> 00:02:05,810

about the upcoming skeptic on in October

46

00:02:11,200 --> 00:02:08,780

we have news of the possibility of a

47

00:02:14,350 --> 00:02:11,210

crash and a sign language interpreter

48

00:02:18,640 --> 00:02:14,360

and this is where we might be asking for

49

00:02:20,920 --> 00:02:18,650

your feedback and input then I head to

50

00:02:22,870 --> 00:02:20,930

the powerhouse museum or it's also known

51
00:02:26,110 --> 00:02:22,880
as the Museum of applied Arts and

52
00:02:29,230 --> 00:02:26,120
Sciences here in Sydney to speed meet

53
00:02:31,030 --> 00:02:29,240
the scientists I found myself in a room

54
00:02:34,480 --> 00:02:31,040
full of scientists all sitting at their

55
00:02:36,770 --> 00:02:34,490
desks just waiting just waiting to

56
00:02:40,610 --> 00:02:36,780
interviewed or to chat to the general

57
00:02:43,330 --> 00:02:40,620
public so I chat to marine biologists

58
00:02:45,830 --> 00:02:43,340
and people involved with bees and

59
00:02:48,230 --> 00:02:45,840
ecologists and all sorts of people this

60
00:02:50,720 --> 00:02:48,240
week and this is the first part of a

61
00:02:53,450 --> 00:02:50,730
series of these interviews next week

62
00:02:55,520 --> 00:02:53,460
part 2 and the week after part 3 there

63
00:02:58,130 --> 00:02:55,530

were just so many scientists to meet

64

00:02:59,690 --> 00:02:58,140

then to wrap up the show a really

65

00:03:03,260 --> 00:02:59,700

interesting interview with our reporter

66

00:03:22,250 --> 00:03:03,270

Kevin Davies based in Canberra now have

67

00:03:25,610 --> 00:03:22,260

a listen to this now some of you out

68

00:03:27,950 --> 00:03:25,620

there probably knew what that said that

69

00:03:29,240 --> 00:03:27,960

little bit of Morse code well we're

70

00:03:31,100 --> 00:03:29,250

going to be finding out about a

71

00:03:33,440 --> 00:03:31,110

wonderful lady called will

72

00:03:35,510 --> 00:03:33,450

affectionately known as mrs. Mac who

73

00:03:37,580 --> 00:03:35,520

taught thousands of people Morse code

74

00:03:43,180 --> 00:03:37,590

now before I listen to this interview

75

00:03:45,920 --> 00:03:43,190

myself I knew SOS in Morse code due to

76

00:03:47,930 --> 00:03:45,930

which a lot of people do it's quite

77

00:03:51,229 --> 00:03:47,940

famous but after listening to this

78

00:03:52,760 --> 00:03:51,239

interview I now know a couple more

79

00:03:55,910 --> 00:03:52,770

letters in Morse code and I won't forget

80

00:03:58,610 --> 00:03:55,920

them it's really interesting maybe I

81

00:04:00,199 --> 00:03:58,620

should learn the whole alphabet but now

82

00:04:04,070 --> 00:04:00,209

it's time for me to run downstairs and

83

00:04:07,370 --> 00:04:04,080

have some caramel pudding thanks Trish

84

00:04:09,170 --> 00:04:07,380

mmm my good friend Trish Han who appears

85

00:04:12,710 --> 00:04:09,180

on the sceptic zone from time to time is

86

00:04:15,290 --> 00:04:12,720

also my secret supplier of caramel

87

00:04:17,449 --> 00:04:15,300

pudding yes I'm gonna run downstairs

88

00:04:19,780 --> 00:04:17,459

grab some of that quickly come back and

89

00:04:43,310 --> 00:04:19,790

bring you the skeptic zone

90

00:04:46,560 --> 00:04:43,320

[Music]

91

00:04:49,170 --> 00:04:46,570

I'm with Kate Brown and Kate you're

92

00:04:51,630 --> 00:04:49,180

going to be the MC for skeptic on it's

93

00:04:54,260 --> 00:04:51,640

true I can't believe I'm being allowed

94

00:04:57,030 --> 00:04:54,270

let loose on the microphone for two days

95

00:04:58,890 --> 00:04:57,040

we're really looking forward to it now

96

00:05:00,600 --> 00:04:58,900

for those people out there especially in

97

00:05:02,460 --> 00:05:00,610

Australia and they're thinking okay

98

00:05:04,380 --> 00:05:02,470

Brown where do I know that name from

99

00:05:06,780 --> 00:05:04,390

where might people have seen you before

100

00:05:08,820 --> 00:05:06,790

popped up in a few places I'm well known

101
00:05:10,110 --> 00:05:08,830
for being a consumer journalist I work

102
00:05:12,540 --> 00:05:10,120
at choice

103
00:05:15,180 --> 00:05:12,550
I was also the artist formerly known as

104
00:05:17,880 --> 00:05:15,190
the guilty mum on the sadly now defunct

105
00:05:20,670 --> 00:05:17,890
TV show the check out sorry it's not to

106
00:05:23,490 --> 00:05:20,680
punch it's on hiatus according to the

107
00:05:26,100 --> 00:05:23,500
ABC oh yeah I was gonna ask you about

108
00:05:27,420 --> 00:05:26,110
that well let's look at choice first how

109
00:05:29,600 --> 00:05:27,430
long have you been with choice magazine

110
00:05:34,230 --> 00:05:29,610
I've worked a choice for over ten years

111
00:05:37,260 --> 00:05:34,240
I'm an editor there now I fully immersed

112
00:05:39,270 --> 00:05:37,270
in the consumer world but with a big

113
00:05:42,240 --> 00:05:39,280

dash of science obviously we love to

114

00:05:44,880 --> 00:05:42,250

test things at choice we love to get the

115

00:05:46,560 --> 00:05:44,890

real facts on things that some of the

116

00:05:50,120 --> 00:05:46,570

area's I look at are things like food

117

00:05:53,520 --> 00:05:50,130

the wellness industry the diet industry

118

00:05:55,950 --> 00:05:53,530

product safety and just about anything

119

00:05:57,930 --> 00:05:55,960

else you can think of I like I like the

120

00:06:00,030 --> 00:05:57,940

fact you said that wellness industry and

121

00:06:03,450 --> 00:06:00,040

it is an industry isn't it the wellness

122

00:06:05,490 --> 00:06:03,460

industry is huge and even with choice

123

00:06:07,500 --> 00:06:05,500

Raiders I'm surprised often if we

124

00:06:09,690 --> 00:06:07,510

present the facts on a particular

125

00:06:11,610 --> 00:06:09,700

product that's having its moment in the

126

00:06:13,170 --> 00:06:11,620

Sun we do get a lot of kickback from

127

00:06:15,420 --> 00:06:13,180

people even if we provide all the

128

00:06:18,300 --> 00:06:15,430

evidence or the lack of evidence more

129

00:06:20,640 --> 00:06:18,310

more commonly and it is interesting how

130

00:06:23,370 --> 00:06:20,650

much people do latch onto things around

131

00:06:25,740 --> 00:06:23,380

wellness these days and really really

132

00:06:29,520 --> 00:06:25,750

emotionally defend them and when you say

133

00:06:32,400 --> 00:06:29,530

kickback of course you mean flack I do I

134

00:06:34,830 --> 00:06:32,410

don't mean I'm funded by the ante bonus

135

00:06:37,410 --> 00:06:34,840

industry someone did actually accuse me

136

00:06:41,180 --> 00:06:37,420

once of being funded by what was it it

137

00:06:45,510 --> 00:06:41,190

made me laugh the the plant oil industry

138

00:06:47,220 --> 00:06:45,520

hmm the plant oil industry I had written

139

00:06:49,330 --> 00:06:47,230

an article about coconut oil which is

140

00:06:53,020 --> 00:06:49,340

apparently can cure anything

141

00:06:55,180 --> 00:06:53,030

you know yes and this and I suggested

142

00:06:57,879 --> 00:06:55,190

that things like olive oil or other oils

143

00:06:59,920 --> 00:06:57,889

were just as good if not better and a

144

00:07:02,260 --> 00:06:59,930

gentleman did write in and suggest that

145

00:07:04,719 --> 00:07:02,270

I was funded I don't know if there is

146

00:07:06,640 --> 00:07:04,729

such an industry but if there is sadly

147

00:07:09,400 --> 00:07:06,650

that they're not putting any money in my

148

00:07:11,740 --> 00:07:09,410

pocket we're all funded by some

149

00:07:14,379 --> 00:07:11,750

nefarious big corporation didn't you

150

00:07:17,200 --> 00:07:14,389

know that well I didn't your check come

151

00:07:19,450 --> 00:07:17,210

yet I'm still waiting for my check but

152

00:07:20,980 --> 00:07:19,460

Joyce magazine folks we've had a long

153

00:07:22,480 --> 00:07:20,990

and happy relationship at the sceptics

154

00:07:24,640 --> 00:07:22,490

of choice magazine we've gone in there

155

00:07:26,800 --> 00:07:24,650

often to have a chat about this product

156

00:07:29,800 --> 00:07:26,810

or that product or or more recently I

157

00:07:31,090 --> 00:07:29,810

think we did strange devices but this is

158

00:07:32,680 --> 00:07:31,100

exactly the sort of thing choice

159

00:07:35,680 --> 00:07:32,690

magazine have been looking at for years

160

00:07:37,930 --> 00:07:35,690

it is and the area that I look after we

161

00:07:41,740 --> 00:07:37,940

do look at health so we do see a lot of

162

00:07:43,750 --> 00:07:41,750

interesting health products sadly many

163

00:07:44,950 --> 00:07:43,760

of them appear in pharmacies and of

164

00:07:47,469 --> 00:07:44,960

course the most consumers look

165

00:07:49,360 --> 00:07:47,479

completely legitimate and even before I

166

00:07:51,879 --> 00:07:49,370

worked at choice I assumed anything in a

167

00:07:55,840 --> 00:07:51,889

pharmacy was legitimate we've looked at

168

00:07:58,060 --> 00:07:55,850

things like magnet cures for back pain

169

00:08:00,400 --> 00:07:58,070

and muscular pain

170

00:08:03,190 --> 00:08:00,410

the fabulous pain eraser which we looked

171

00:08:05,350 --> 00:08:03,200

at last year at choice which is like

172

00:08:07,300 --> 00:08:05,360

kind of using one of those things you

173

00:08:09,610 --> 00:08:07,310

like your barbecue and putting it

174

00:08:11,379 --> 00:08:09,620

against your skin doesn't do much but

175

00:08:14,980 --> 00:08:11,389

the pain arises you know well over 50

176
00:08:16,480 --> 00:08:14,990
bucks so an interesting choice for pain

177
00:08:18,339 --> 00:08:16,490
relief but yeah look these things are

178
00:08:22,240 --> 00:08:18,349
constantly growing another hedge and

179
00:08:25,540 --> 00:08:22,250
keep us pretty busy yeah yeah and I

180
00:08:28,390 --> 00:08:25,550
think that did that winner chunky award

181
00:08:30,070 --> 00:08:28,400
last year from remembering Crickett yeah

182
00:08:32,769 --> 00:08:30,080
and and just for those listeners

183
00:08:34,180 --> 00:08:32,779
overseas the shock ease it's like the

184
00:08:35,680 --> 00:08:34,190
bent spoon award the Australians get

185
00:08:38,079 --> 00:08:35,690
because it's it's the ward you don't

186
00:08:40,480 --> 00:08:38,089
want to get from choice magazines true

187
00:08:44,769 --> 00:08:40,490
the the winners never show up certainly

188
00:08:48,600 --> 00:08:44,779

Richard not once and many of the winners

189

00:08:52,420 --> 00:08:48,610

have included large banking corporations

190

00:08:54,490 --> 00:08:52,430

other corporates large food

191

00:08:57,490 --> 00:08:54,500

manufacturers they never turn up it's

192

00:08:59,410 --> 00:08:57,500

very sad it's very sad now this does tie

193

00:09:01,159 --> 00:08:59,420

in with the work in the checkout of

194

00:09:03,809 --> 00:09:01,169

course and I remember

195

00:09:05,069 --> 00:09:03,819

when the checkout started just before it

196

00:09:07,799 --> 00:09:05,079

started I went to there we see and I

197

00:09:09,809 --> 00:09:07,809

interviewed chairs I think and he was

198

00:09:12,179 --> 00:09:09,819

still one of the producers yeah yeah

199

00:09:14,819 --> 00:09:12,189

Chaz did a lot of script editing behind

200

00:09:17,039 --> 00:09:14,829

the scenes work you can play spot the

201
00:09:19,499 --> 00:09:17,049
chairs too he often pops up in some of

202
00:09:22,409 --> 00:09:19,509
the segments I must have a look at some

203
00:09:24,359 --> 00:09:22,419
of the there I would say repeat so the

204
00:09:26,699 --> 00:09:24,369
good thing is and what I really love

205
00:09:28,979 --> 00:09:26,709
many things about the check out

206
00:09:32,429 --> 00:09:28,989
it's a favorite show of the skeptics of

207
00:09:34,469 --> 00:09:32,439
course but so much of it is simply

208
00:09:35,489 --> 00:09:34,479
freely available on YouTube and I think

209
00:09:37,289 --> 00:09:35,499
that it's a wonderful idea

210
00:09:39,210 --> 00:09:37,299
yeah look I think with the show it was a

211
00:09:41,579 --> 00:09:39,220
great approach they released every

212
00:09:43,469 --> 00:09:41,589
episode on YouTube they also put each

213
00:09:44,099 --> 00:09:43,479

segment on YouTube which i think is

214

00:09:45,929 --> 00:09:44,109

really clever

215

00:09:48,479 --> 00:09:45,939

there's nothing more annoying than

216

00:09:50,099 --> 00:09:48,489

having to scroll through 30 minutes of a

217

00:09:52,069 --> 00:09:50,109

show trying to find that segment that

218

00:09:55,009 --> 00:09:52,079

you like that pertain to your interests

219

00:09:57,869 --> 00:09:55,019

and I thought that was a great way of

220

00:10:00,239 --> 00:09:57,879

making that information accessible but

221

00:10:01,409 --> 00:10:00,249

really shareable so even even the

222

00:10:04,169 --> 00:10:01,419

dreaded guilty mum has her own channel

223

00:10:09,029 --> 00:10:04,179

with every single episode separately

224

00:10:11,879 --> 00:10:09,039

listed and I think that's what has given

225

00:10:14,279 --> 00:10:11,889

the show so much Skype in terms of

226

00:10:16,289 --> 00:10:14,289

viewers when the show was put on hiatus

227

00:10:18,359 --> 00:10:16,299

recently it was interesting to see that

228

00:10:20,429 --> 00:10:18,369

quite a few people from overseas had

229

00:10:21,779 --> 00:10:20,439

been watching it in the States and in

230

00:10:23,549 --> 00:10:21,789

Canada and even though they were saying

231

00:10:24,779 --> 00:10:23,559

look how laws are different we're you

232

00:10:26,009 --> 00:10:24,789

know I could take a lot of the

233

00:10:28,139 --> 00:10:26,019

principles because a lot of them are

234

00:10:30,210 --> 00:10:28,149

just common sense and apply them to our

235

00:10:32,069 --> 00:10:30,220

own situations so I think you know it's

236

00:10:34,319 --> 00:10:32,079

a it was a really fantastic public

237

00:10:36,359 --> 00:10:34,329

service it's a great way to give people

238

00:10:38,849 --> 00:10:36,369

information that's memorable by telling

239

00:10:41,609 --> 00:10:38,859

a story making a joke

240

00:10:43,409 --> 00:10:41,619

and it really resonated with with

241

00:10:45,689 --> 00:10:43,419

younger people as well and so I think

242

00:10:48,179 --> 00:10:45,699

you know as sad as it is that it's on

243

00:10:49,619 --> 00:10:48,189

hiatus or possibly acts you know that

244

00:10:51,569 --> 00:10:49,629

that great information lives on on

245

00:10:53,249 --> 00:10:51,579

YouTube it certainly does now folks in

246

00:10:56,819 --> 00:10:53,259

this week's show notes I shall link

247

00:10:58,469 --> 00:10:56,829

directly to the guilty mum Channel is it

248

00:11:01,019 --> 00:10:58,479

called the guilty mum or as a guilty mum

249

00:11:03,000 --> 00:11:01,029

or Kelsi mom has a guilty mum Oh even

250

00:11:05,560 --> 00:11:03,010

when you say it now I'm

251

00:11:09,220 --> 00:11:05,570

definitely not one in my own life but

252

00:11:11,530 --> 00:11:09,230

I'm more of a slack mom that yes as a

253

00:11:13,510 --> 00:11:11,540

guilty mum she does have her own channel

254

00:11:15,820 --> 00:11:13,520

and there's some other great consumer

255

00:11:18,280 --> 00:11:15,830

info on there they've done some great

256

00:11:21,370 --> 00:11:18,290

work on pharmacy some of those great

257

00:11:22,840 --> 00:11:21,380

pharmacy products in fact that you will

258

00:11:24,790 --> 00:11:22,850

see chosen that there was a great one

259

00:11:28,690 --> 00:11:24,800

about cold and flu medication shows how

260

00:11:32,110 --> 00:11:28,700

to cameo at dresses a giant nose very

261

00:11:34,660 --> 00:11:32,120

cranky nose they'll watch that one

262

00:11:36,850 --> 00:11:34,670

but yeah hop on and have a look

263

00:11:38,260 --> 00:11:36,860

certainly why again folks Lincoln this

264

00:11:39,550 --> 00:11:38,270

week's show notes and I'll tell you a

265

00:11:42,280 --> 00:11:39,560

very good friend of ours in the

266

00:11:44,350 --> 00:11:42,290

skeptical world Michael Marshall who is

267

00:11:46,300 --> 00:11:44,360

in the good thinking society in the UK I

268

00:11:48,190 --> 00:11:46,310

would sometimes send him a link to

269

00:11:49,780 --> 00:11:48,200

something from the checkout and he'd

270

00:11:51,520 --> 00:11:49,790

write back hours and hours later said

271

00:11:54,850 --> 00:11:51,530

I've just spent the last six hours

272

00:11:56,560 --> 00:11:54,860

watching the checkout quite addictive so

273

00:11:59,260 --> 00:11:56,570

congratulations by the way and all that

274

00:12:02,050 --> 00:11:59,270

work yeah and I think you came across as

275

00:12:03,790 --> 00:12:02,060

your character very well it was you did

276

00:12:06,040 --> 00:12:03,800

it with such style and the hint of

277

00:12:06,790 --> 00:12:06,050

cheekiness and humor and I thought it

278

00:12:09,580 --> 00:12:06,800

was very enjoyable

279

00:12:11,290 --> 00:12:09,590

thank you it was brave Julian and Craig

280

00:12:14,470 --> 00:12:11,300

to give me a guy I'd never been let

281

00:12:16,090 --> 00:12:14,480

loose on a camera before so maybe it was

282

00:12:17,890 --> 00:12:16,100

good therapy after being a parent myself

283

00:12:20,140 --> 00:12:17,900

but yeah it was it was a great show to

284

00:12:22,300 --> 00:12:20,150

work on and and and for me like a great

285

00:12:24,880 --> 00:12:22,310

way to say that consumer faith doesn't

286

00:12:27,190 --> 00:12:24,890

have to be boring and fact you know

287

00:12:28,870 --> 00:12:27,200

evidence-based stuff doesn't have to be

288

00:12:31,300 --> 00:12:28,880

boring you can you know it's how you

289

00:12:32,710 --> 00:12:31,310

tell the story so we are very excited

290

00:12:34,480 --> 00:12:32,720

and very much looking forward to the

291

00:12:38,680 --> 00:12:34,490

fact that you're M seeing our skeptic on

292

00:12:40,300 --> 00:12:38,690

in October how do you feeling about that

293

00:12:42,550 --> 00:12:40,310

you've sort of taking a big breath or

294

00:12:44,200 --> 00:12:42,560

what do you expect oh look you know I

295

00:12:46,270 --> 00:12:44,210

know Laurens long did it last year and

296

00:12:50,020 --> 00:12:46,280

he's very good with a Rubik's Cube I

297

00:12:52,180 --> 00:12:50,030

don't think I have any talents to rival

298

00:12:55,000 --> 00:12:52,190

that I do have a very loud voice and I

299

00:12:57,550 --> 00:12:55,010

am quite bossy being a parent so I you

300

00:12:59,860 --> 00:12:57,560

know I'll be keeping people in line I'm

301

00:13:01,480 --> 00:12:59,870

really excited to UM I'm also really

302

00:13:02,620 --> 00:13:01,490

excited to be privy to the whole two

303

00:13:05,290 --> 00:13:02,630

dates because you've got an amazing

304

00:13:07,150 --> 00:13:05,300

line-up and I'm really looking forward

305

00:13:09,060 --> 00:13:07,160

to it I loved it last year and I think

306

00:13:10,960 --> 00:13:09,070

this year looks even even better again

307

00:13:13,510 --> 00:13:10,970

absolutely well thank you very much for

308

00:13:14,900 --> 00:13:13,520

your time folks yet another reason my

309

00:13:16,430 --> 00:13:14,910

goodness me to come

310

00:13:18,590 --> 00:13:16,440

- you're saying skeptics National

311

00:13:20,900 --> 00:13:18,600

Convention skeptic on and you can meet

312

00:13:23,350 --> 00:13:20,910

their guilty mum in person okay thank

313

00:13:35,440 --> 00:13:23,360

you very much thank you ceasing

314

00:13:38,090 --> 00:13:35,450

[Music]

315

00:13:40,910 --> 00:13:38,100

Blackwatch your guide to quackery Pell

316

00:13:41,930 --> 00:13:40,920

fraud and intelligent decisions operated

317

00:13:44,660 --> 00:13:41,940

by Stephan Barratt

318

00:13:46,970 --> 00:13:44,670

MD quite watch is now an international

319

00:13:49,220 --> 00:13:46,980

network of people who concerned about

320

00:13:51,740 --> 00:13:49,230

health related frauds myths fans

321

00:13:54,590 --> 00:13:51,750

fallacies and misconduct its primary

322

00:13:57,050 --> 00:13:54,600

focus is on quackery related information

323

00:13:59,870 --> 00:13:57,060

that is difficult or impossible to get

324

00:14:03,260 --> 00:13:59,880

elsewhere articles on quackery include

325

00:14:06,880 --> 00:14:03,270

quackery how should it be defined how it

326

00:14:10,070 --> 00:14:06,890

sells 26 ways to spot it how it comes

327

00:14:12,560 --> 00:14:10,080

cancer patients 7 warning signs for

328

00:14:15,550 --> 00:14:12,570

bogus science why health professionals

329

00:14:17,630 --> 00:14:15,560

become quacks and many more including

330

00:14:21,200 --> 00:14:17,640

in-depth looks at an acupuncture

331

00:14:26,630 --> 00:14:21,210

chiropractic homeopathy naturopathy and

332

00:14:36,500 --> 00:14:26,640

much more visit www.gfi.com/webmonitor

333

00:14:46,260 --> 00:14:41,700

here's main our spooky action at the

334

00:14:47,940 --> 00:14:46,270

distance now I just love hearing about

335

00:14:51,510 --> 00:14:47,950

your travels you're going to be at the

336

00:14:53,310 --> 00:14:51,520

the skeptics convention yes getting you

337

00:14:55,350 --> 00:14:53,320

a happily first cab off the rank I think

338

00:14:57,120 --> 00:14:55,360

with a brand new show and look Carl

339

00:14:58,800 --> 00:14:57,130

since I've met you many many years ago

340

00:15:00,300 --> 00:14:58,810

the world has changed a lot in the place

341

00:15:02,160 --> 00:15:00,310

of science is certainly very different

342

00:15:03,780 --> 00:15:02,170

and the way science is regarded seems to

343

00:15:06,660 --> 00:15:03,790

be in under threat at the moment do you

344

00:15:08,220 --> 00:15:06,670

feel that or not there's the rise of

345

00:15:11,430 --> 00:15:08,230

fake news but there's always been fake

346

00:15:15,000 --> 00:15:11,440

news going all the way back to the Great

347

00:15:15,990 --> 00:15:15,010

Fire of London and even earlier with the

348

00:15:18,450 --> 00:15:16,000

Great Fire of Rome

349

00:15:20,250 --> 00:15:18,460

so because I always try and blame a

350

00:15:21,630 --> 00:15:20,260

group of people that they don't like us

351

00:15:26,070 --> 00:15:21,640

starting it that's always one they

352

00:15:28,740 --> 00:15:26,080

always bring up so science has a

353

00:15:30,960 --> 00:15:28,750

disadvantage which is that it in some

354

00:15:32,400 --> 00:15:30,970

cases can be absolutely true and some

355

00:15:34,680 --> 00:15:32,410

people don't like this for various

356

00:15:37,470 --> 00:15:34,690

reasons so it was a guard to global

357

00:15:40,950 --> 00:15:37,480

warming what we have is a situation that

358

00:15:44,130 --> 00:15:40,960

out of a world gross domestic product of

359

00:15:47,010 --> 00:15:44,140

about 90 or so billion dollars the

360

00:15:49,140 --> 00:15:47,020

fossil fuel companies gets subsidies of

361

00:15:53,670 --> 00:15:49,150

about five and a bit trillion dollars a

362

00:15:56,040 --> 00:15:53,680

year or six point two five percent of

363

00:15:59,780 --> 00:15:56,050

the world's gross domestic product so

364

00:16:02,010 --> 00:15:59,790

every single dollar that is earned the

365

00:16:04,590 --> 00:16:02,020

your fossil fuel companies on average

366

00:16:07,260 --> 00:16:04,600

around the world get six and a half six

367

00:16:08,700 --> 00:16:07,270

and a quarter cents question when was

368

00:16:11,130 --> 00:16:08,710

the last time you saw a fossil fuel

369

00:16:12,510 --> 00:16:11,140

company being broke and trying to have a

370

00:16:14,610 --> 00:16:12,520

lemon gun sale at the local primary

371

00:16:17,760 --> 00:16:14,620

school on a Sunday morning to raise some

372

00:16:20,310 --> 00:16:17,770

money so the question is why do the

373

00:16:22,650 --> 00:16:20,320

fossil fuel companies get so much money

374

00:16:25,170 --> 00:16:22,660

on top of the profits while they're

375

00:16:26,940 --> 00:16:25,180

destroying our environment it seems that

376

00:16:29,340 --> 00:16:26,950

they must have friends in high places in

377

00:16:30,720 --> 00:16:29,350

Australia the latest data we have goes

378

00:16:33,210 --> 00:16:30,730

back in 2015

379

00:16:36,270 --> 00:16:33,220

and the amount of money paid as

380

00:16:39,180 --> 00:16:36,280

subsidies free money to the fossil fuel

381

00:16:41,420 --> 00:16:39,190

companies is 2% of our GDP it's more

382

00:16:44,490 --> 00:16:41,430

than the military yet it works out to in

383

00:16:47,910 --> 00:16:44,500

2015 dollars one thousand two hundred

384

00:16:51,780 --> 00:16:47,920

and sixty dollars that every Australian

385

00:16:54,360 --> 00:16:51,790

citizen baby to grandparent pays to the

386

00:16:56,010 --> 00:16:54,370

fossil fuel companies on top of their

387

00:16:57,450 --> 00:16:56,020

massive profits and the fact that

388

00:16:59,850 --> 00:16:57,460

they're destroying the environment

389

00:17:01,200 --> 00:16:59,860

because they can just buy what they want

390

00:17:03,240 --> 00:17:01,210

really that Deb that bought the

391

00:17:04,530 --> 00:17:03,250

politicians well the answer to that is

392

00:17:07,050 --> 00:17:04,540

that you should become a politician I

393

00:17:09,120 --> 00:17:07,060

actually found on my visit to China the

394

00:17:12,840 --> 00:17:09,130

original poster where Mao tse-tung's

395

00:17:15,360 --> 00:17:12,850

said political power grows out of the

396

00:17:16,079 --> 00:17:15,370

barrel of a gun I've got their poster

397

00:17:17,670 --> 00:17:16,089

Wow

398

00:17:22,050 --> 00:17:17,680

right it's a propaganda poster in

399

00:17:24,600 --> 00:17:22,060

Shanghai so in Australia and most of the

400

00:17:28,980 --> 00:17:24,610

Western world political power grows out

401
00:17:31,740 --> 00:17:28,990
of the politics out of the Parliament so

402
00:17:34,050 --> 00:17:31,750
everybody like I did run for politics

403
00:17:35,820 --> 00:17:34,060
and won it or if you can't support

404
00:17:38,850 --> 00:17:35,830
somebody who will because you can have

405
00:17:41,250 --> 00:17:38,860
influence but you don't have power until

406
00:17:43,020 --> 00:17:41,260
you can write a law so everybody get

407
00:17:44,520 --> 00:17:43,030
into politics and that way the world

408
00:17:46,380 --> 00:17:44,530
will be a better place it's a hard run

409
00:17:48,390 --> 00:17:46,390
and yeah and one of the things that they

410
00:17:50,070 --> 00:17:48,400
they do you remember several years ago

411
00:17:52,320 --> 00:17:50,080
many years ago John Howard spent a lot

412
00:17:54,090 --> 00:17:52,330
of time walking around the pros in Prime

413
00:17:57,780 --> 00:17:54,100

Minister of Australia in various pests

414

00:17:59,700 --> 00:17:57,790

for coal colored jumpsuits on look

415

00:18:02,460 --> 00:17:59,710

hey what else he did that year alright

416

00:18:04,980 --> 00:18:02,470

now what he did was he spent two thirds

417

00:18:06,330 --> 00:18:04,990

of Australia's GDP on submarines that

418

00:18:07,800 --> 00:18:06,340

could not work the columns class

419

00:18:09,450 --> 00:18:07,810

submarines and because they're going to

420

00:18:11,070 --> 00:18:09,460

make local jobs in Adelaide looks like

421

00:18:12,900 --> 00:18:11,080

that wasn't it yeah and making him a

422

00:18:16,140 --> 00:18:12,910

world-class submarine is not a trivial

423

00:18:18,960 --> 00:18:16,150

task and we failed and as a result the

424

00:18:20,310 --> 00:18:18,970

way that he used to convince people not

425

00:18:22,110 --> 00:18:20,320

again to politics we've got wearing

426

00:18:24,690 --> 00:18:22,120

personal jumpsuits the best thing the

427

00:18:26,790 --> 00:18:24,700

politicians have done to us is so that

428

00:18:28,560 --> 00:18:26,800

when I say hey Minard why don't you run

429

00:18:30,030 --> 00:18:28,570

for politics and automatically as a

430

00:18:32,010 --> 00:18:30,040

reflex without even thinking about it

431

00:18:34,260 --> 00:18:32,020

you saying oh god no they're all crooks

432

00:18:37,080 --> 00:18:34,270

and you're missing the point that if you

433

00:18:39,360 --> 00:18:37,090

go in there'll be an honest person who

434

00:18:41,220 --> 00:18:39,370

cares about our children and their

435

00:18:43,560 --> 00:18:41,230

children so this is my lesson for

436

00:18:45,330 --> 00:18:43,570

Australians run for politics or support

437

00:18:47,280 --> 00:18:45,340

people who do take your good people in

438

00:18:48,330 --> 00:18:47,290

there passing laws that we like see the

439

00:18:49,440 --> 00:18:48,340

thing that I would imagine be a

440

00:18:51,360 --> 00:18:49,450

challenge particularly for a rational

441

00:18:53,040 --> 00:18:51,370

person like yourself Carl is it is that

442

00:18:54,630 --> 00:18:53,050

politics is the art of compromise

443

00:18:56,490 --> 00:18:54,640

because you can't always get what you

444

00:18:58,920 --> 00:18:56,500

want you have to compromise and how do

445

00:19:00,420 --> 00:18:58,930

you compromise facts you can't and you

446

00:19:03,000 --> 00:19:00,430

say that's why you just go in there and

447

00:19:04,470 --> 00:19:03,010

be yourself and be honest and be

448

00:19:06,330 --> 00:19:04,480

yourself and just live whatever is on

449

00:19:08,610 --> 00:19:06,340

your mind float out Donald Trump let's

450

00:19:10,800 --> 00:19:08,620

everything I float out and that's been

451

00:19:12,720 --> 00:19:10,810

an interesting lesson it is it's almost

452

00:19:14,190 --> 00:19:12,730

like yeah yeah I don't like what he does

453

00:19:16,350 --> 00:19:14,200

but the fact that he's like he's

454

00:19:18,180 --> 00:19:16,360

actually he appears to be keeping

455

00:19:19,410 --> 00:19:18,190

promises from his election that you

456

00:19:21,420 --> 00:19:19,420

don't they they normally throw him away

457

00:19:22,860 --> 00:19:21,430

and it's like he's got a list he's going

458

00:19:25,080 --> 00:19:22,870

through like Gough Whitlam used to well

459

00:19:27,600 --> 00:19:25,090

whenever I see him on TV I get the

460

00:19:30,480 --> 00:19:27,610

mental impression that I'm watching a

461

00:19:33,120 --> 00:19:30,490

kid in year five at a primary school

462

00:19:37,470 --> 00:19:33,130

giving a report on a book that he hasn't

463

00:19:38,610 --> 00:19:37,480

read marvelous fantastic great a whole

464

00:19:41,190 --> 00:19:38,620

lot of really soft words nothing

465

00:19:42,450 --> 00:19:41,200

specific and dr. Kyle wake up and catch

466

00:19:46,620 --> 00:19:42,460

you online where we can see what you're

467

00:19:49,530 --> 00:19:46,630

up to and dr. Calvo Comdr kar Elcom will

468

00:19:51,780 --> 00:19:49,540

have all my shows and also are just a

469

00:19:52,980 --> 00:19:51,790

freebie I'm very happy to do free

470

00:19:54,420 --> 00:19:52,990

science QAS

471

00:19:56,610 --> 00:19:54,430

with schools anywhere in Australia

472

00:19:58,770 --> 00:19:56,620

around the world just go to dr. Kyle

473

00:20:00,420 --> 00:19:58,780

calm and see the bit that says teachers

474

00:20:02,700 --> 00:20:00,430

want a free sized Q&A session with your

475

00:20:03,810 --> 00:20:02,710

class cost you nothing and you'll fit

476
00:20:04,490 --> 00:20:03,820
into your schedule but you're travelling

477
00:20:06,260 --> 00:20:04,500
around anyway maybe

478
00:20:07,490 --> 00:20:06,270
you never know I use this wonderful

479
00:20:09,890 --> 00:20:07,500
invention called the interwebs

480
00:20:11,390 --> 00:20:09,900
wow that thing that thing yeah alright

481
00:20:13,580 --> 00:20:11,400
and that's what Scott's for I wondered

482
00:20:14,600 --> 00:20:13,590
yeah well I keep on coming across people

483
00:20:18,620 --> 00:20:14,610
who don't know the difference between

484
00:20:21,170 --> 00:20:18,630
these three things Wi-Fi the Internet

485
00:20:22,790 --> 00:20:21,180
and the world wide web it takes about 10

486
00:20:25,100 --> 00:20:22,800
mins to educate them and then they're

487
00:20:26,960 --> 00:20:25,110
very happy and go Cal great talking you

488
00:20:28,509 --> 00:20:26,970

again thank you dr. Maynard

489

00:20:30,909 --> 00:20:28,519

[Applause]

490

00:20:32,529 --> 00:20:30,919

I guess the music is pumping here and of

491

00:20:33,970 --> 00:20:32,539

course what would science be without the

492

00:20:35,530 --> 00:20:33,980

great

493

00:20:38,800 --> 00:20:35,540

[Applause]

494

00:20:41,260 --> 00:20:38,810

the great early work of some pioneers

495

00:20:43,030 --> 00:20:41,270

much of the evolutionary science that

496

00:20:45,460 --> 00:20:43,040

Darwin followed of course that was cool

497

00:20:47,440 --> 00:20:45,470

and the gang cool of course studied at

498

00:20:49,330 --> 00:20:47,450

the University of Edinburgh the gang

499

00:20:51,100 --> 00:20:49,340

studied at the University of Brooklyn

500

00:20:54,730 --> 00:20:51,110

they had tough times but look this is

501
00:20:56,510 --> 00:20:54,740
what they worked out oh yes you love

502
00:20:58,880 --> 00:20:56,520
science

503
00:21:00,410 --> 00:20:58,890
hang on I've never chance to drop my big

504
00:21:01,040 --> 00:21:00,420
word up I've got a big science word to

505
00:21:03,080 --> 00:21:01,050
drop on you

506
00:21:05,960 --> 00:21:03,090
if epigenetics what do you know about

507
00:21:10,040 --> 00:21:05,970
that car locks Wow okay is it a real

508
00:21:15,110 --> 00:21:10,050
thing in humans or not yes so the best

509
00:21:16,520 --> 00:21:15,120
example of every genetics is the Dutch

510
00:21:21,020 --> 00:21:16,530
hunger winter

511
00:21:23,330 --> 00:21:21,030
oh my guess so after the for the end of

512
00:21:25,460 --> 00:21:23,340
this fixing World War the Allies were

513
00:21:27,830 --> 00:21:25,470

pushing across towards Holland having

514

00:21:30,080 --> 00:21:27,840

successfully invade at Europe they

515

00:21:31,520 --> 00:21:30,090

were trying to get to a bridge at Arnhem

516

00:21:35,840 --> 00:21:31,530

as in Arnhem Land

517

00:21:37,460 --> 00:21:35,850

it's named after that and in preparation

518

00:21:40,780 --> 00:21:37,470

for their getting there the Dutch people

519

00:21:43,430 --> 00:21:40,790

rose up against their nasty oppressors

520

00:21:45,860 --> 00:21:43,440

however the Americans and the Allies

521

00:21:48,740 --> 00:21:45,870

couldn't get there in time the Dutch

522

00:21:51,169 --> 00:21:48,750

within prosper persecuted by their Nazi

523

00:21:52,250 --> 00:21:51,179

oppressors and then starved during Wars

524

00:21:54,370 --> 00:21:52,260

that turning out to be an especially

525

00:21:56,770 --> 00:21:54,380

nasty winter

526
00:21:58,900 --> 00:21:56,780
as you would expect many people died as

527
00:22:02,110 --> 00:21:58,910
you would expect pregnant women would

528
00:22:04,600 --> 00:22:02,120
give birth to smaller babies totally

529
00:22:06,550 --> 00:22:04,610
expected but tragic but expected what

530
00:22:08,740 --> 00:22:06,560
was the big surprise was that when those

531
00:22:11,170 --> 00:22:08,750
babies grew up they then gave birth to

532
00:22:13,600 --> 00:22:11,180
smaller babies who in turn gave birth of

533
00:22:16,450 --> 00:22:13,610
smaller babies so that's there be

534
00:22:20,050 --> 00:22:16,460
genetics epi means around genexus

535
00:22:22,420 --> 00:22:20,060
genetics so you don't change the DNA but

536
00:22:24,670 --> 00:22:22,430
you change you put a little markers on

537
00:22:26,380 --> 00:22:24,680
it around it so you don't read both bits

538
00:22:29,350 --> 00:22:26,390

of it this is how you've got a graph to

539

00:22:30,880 --> 00:22:29,360

plan for a building and you just leave

540

00:22:35,320 --> 00:22:30,890

out a floor or you leave out the doors

541

00:22:38,590 --> 00:22:35,330

so epigenetics is how there are changes

542

00:22:41,470 --> 00:22:38,600

that happen around the DNA even change

543

00:22:43,120 --> 00:22:41,480

how its expressed so for example it was

544

00:22:44,620 --> 00:22:43,130

just natural selection saying there's

545

00:22:46,780 --> 00:22:44,630

not a lot of food around so let's not

546

00:22:50,440 --> 00:22:46,790

have big babies for a while yeah so in

547

00:22:53,200 --> 00:22:50,450

bees all of these identical when they

548

00:22:56,320 --> 00:22:53,210

come out of the mother but depending on

549

00:22:59,920 --> 00:22:56,330

what they're fed half a dozen will turn

550

00:23:02,260 --> 00:22:59,930

into Queens that are fertile females and

551
00:23:04,240 --> 00:23:02,270
then the rest depending on their fate

552
00:23:06,760 --> 00:23:04,250
what they fed will mostly turn into

553
00:23:12,730 --> 00:23:06,770
sterile females and a very small number

554
00:23:13,940 --> 00:23:12,740
maybe a thousand will turn into foot all

555
00:23:16,010 --> 00:23:13,950
males

556
00:23:17,450 --> 00:23:16,020
and it's all due to every genetics yeah

557
00:23:21,950 --> 00:23:17,460
so it's a real thing Richard I wasn't

558
00:23:26,840 --> 00:23:24,649
yes of course who can forget the early

559
00:23:28,940 --> 00:23:26,850
work and the later work of a doctor

560
00:23:32,509 --> 00:23:28,950
Deborah Harry of course who went to the

561
00:23:36,769 --> 00:23:32,519
University of Studio 56 what the

562
00:23:38,480 --> 00:23:36,779
University of pseudo 54 actually part of

563
00:23:40,399 --> 00:23:38,490

class early transplantation work

564

00:23:43,639 --> 00:23:40,409

unfortunately glass was not exactly a

565

00:23:45,109 --> 00:23:43,649

great idea for a transplant look we've

566

00:23:46,789 --> 00:23:45,119

tried to find a bit of a hushed area

567

00:23:48,350 --> 00:23:46,799

here just a very very crowded room of

568

00:23:50,330 --> 00:23:48,360

the Australian Museum but I'm here with

569

00:23:51,169 --> 00:23:50,340

the producer of science week is that

570

00:23:54,019 --> 00:23:51,179

your correct title

571

00:23:55,999 --> 00:23:54,029

I'm producer to Sydney science festival

572

00:23:58,730 --> 00:23:56,009

so at the Museum of Hyde Arts and

573

00:24:01,070 --> 00:23:58,740

Sciences wow that's wow now that's a lot

574

00:24:03,289 --> 00:24:01,080

of pressure how are you handling it it's

575

00:24:05,810 --> 00:24:03,299

great it's it's a busy time of year for

576

00:24:08,330 --> 00:24:05,820

us but also the most fun time of year

577

00:24:10,549 --> 00:24:08,340

everything is culminating in this week

578

00:24:12,680 --> 00:24:10,559

now what is different about this year's

579

00:24:15,649 --> 00:24:12,690

science festival to ones you've been a

580

00:24:17,269 --> 00:24:15,659

part of us or seen in the past yeah so

581

00:24:19,340 --> 00:24:17,279

it's at the fourth year of the festival

582

00:24:22,100 --> 00:24:19,350

it's actually the biggest festival yet

583

00:24:23,840 --> 00:24:22,110

so we have more partners and more events

584

00:24:26,149 --> 00:24:23,850

than we've ever had before so that's

585

00:24:28,549 --> 00:24:26,159

really exciting this year we've engaged

586

00:24:30,499 --> 00:24:28,559

with libraries throughout Sydney so we

587

00:24:33,590 --> 00:24:30,509

have a lot more community events all

588

00:24:35,810 --> 00:24:33,600

throughout the city and we're also we

589

00:24:38,570 --> 00:24:35,820

co-produced the festival with Australian

590

00:24:39,419 --> 00:24:38,580

Museum so that's been a big change tunes

591

00:24:42,629 --> 00:24:39,429

been

592

00:24:44,129 --> 00:24:42,639

amazing these your background in event

593

00:24:46,070 --> 00:24:44,139

organizational you've got a science

594

00:24:49,889 --> 00:24:46,080

background as well so actually my

595

00:24:51,149 --> 00:24:49,899

backgrounds in botany what's your

596

00:24:52,909 --> 00:24:51,159

favorite flower what's your favorite

597

00:24:56,070 --> 00:24:52,919

plant come on everyone's got their own

598

00:24:59,099 --> 00:24:56,080

so the Canadian banner say favorite

599

00:25:03,299 --> 00:24:59,109

plant is called hog peanut in the Fei

600

00:25:05,789 --> 00:25:03,309

BAC bean family wise I don't get asked

601
00:25:07,379 --> 00:25:05,799
that enough I know why that one doesn't

602
00:25:11,219 --> 00:25:07,389
look good does it do something special

603
00:25:12,839 --> 00:25:11,229
is it weird it just looks amazing if

604
00:25:14,909 --> 00:25:12,849
you're looking at plants a lot there's

605
00:25:16,320 --> 00:25:14,919
some that speak to you in different ways

606
00:25:19,009 --> 00:25:16,330
and there's some that just say be

607
00:25:21,479 --> 00:25:19,019
humorous or friendly and it just always

608
00:25:24,269 --> 00:25:21,489
smile and love it when I see it

609
00:25:25,950 --> 00:25:24,279
hey I have to ask you I think in the

610
00:25:27,180 --> 00:25:25,960
Canadian botany world do you have any

611
00:25:28,680 --> 00:25:27,190
carnivorous plants like the Venus

612
00:25:30,299 --> 00:25:28,690
flytrap or the Western Australian

613
00:25:31,320 --> 00:25:30,309

picture plant you have plants that need

614

00:25:32,999 --> 00:25:31,330

flies or stuff

615

00:25:35,549 --> 00:25:33,009

we sure do what do you what do you have

616

00:25:39,680 --> 00:25:35,559

we have 10 do say plants in the drosera

617

00:25:46,349 --> 00:25:43,519

very acidic environments not much

618

00:25:48,029 --> 00:25:46,359

drainage and the the Canadian Shield

619

00:25:50,669 --> 00:25:48,039

they never get to talk about this that's

620

00:25:52,560 --> 00:25:50,679

all said pitcher cleanser Saracen is

621

00:25:54,119 --> 00:25:52,570

there you can help me because they're

622

00:25:55,889 --> 00:25:54,129

very difficult to grow at home because

623

00:25:57,839 --> 00:25:55,899

you can't get that bog environment in

624

00:26:00,149 --> 00:25:57,849

your garden easily can you is it is

625

00:26:02,369 --> 00:26:00,159

impossible to do I've killed all of the

626

00:26:03,659 --> 00:26:02,379

ones I've tried that makes me feel

627

00:26:05,249 --> 00:26:03,669

better because you're a professional and

628

00:26:07,709 --> 00:26:05,259

you couldn't do it yeah because the soil

629

00:26:12,220 --> 00:26:07,719

is so difficult to match inside yeah

630

00:26:14,440 --> 00:26:12,230

yeah and so rain water not to have one

631

00:26:15,759 --> 00:26:14,450

look congratulations on it once again

632

00:26:16,930 --> 00:26:15,769

and I hope it's going to be great and

633

00:26:18,399 --> 00:26:16,940

thank you for letting us know your

634

00:26:21,399 --> 00:26:18,409

favorite plan now what is it again so we

635

00:26:24,609 --> 00:26:21,409

can go look it up hug peanut Wow can

636

00:26:27,609 --> 00:26:24,619

feel carbon black see Adam Wow and what

637

00:26:30,039 --> 00:26:27,619

website can we find your stuff on Sydney

638

00:26:35,830 --> 00:26:30,049

science comm dot a year thank you very

639

00:26:51,450 --> 00:26:43,490

[Music]

640

00:26:53,970 --> 00:26:51,460

hi I'm Yvette Don trauma aka sigh babe

641

00:26:55,850 --> 00:26:53,980

and I debunk bad science for a living

642

00:26:58,050 --> 00:26:55,860

this includes health nutrition and

643

00:26:59,310 --> 00:26:58,060

general BS on the Internet

644

00:27:01,260 --> 00:26:59,320

and I'm looking forward to seeing you

645

00:27:19,320 --> 00:27:01,270

all at skeptic on on Australia this

646

00:27:22,110 --> 00:27:19,330

October we're in the cafe Madame frou

647

00:27:24,840 --> 00:27:22,120

frou in glee this is hot popular hangout

648

00:27:26,430 --> 00:27:24,850

from four may not actually I wonder if I

649

00:27:28,500 --> 00:27:26,440

can see him he might be here later on

650

00:27:31,170 --> 00:27:28,510

I'm here with ilithya Dean hello Olivia

651
00:27:34,620 --> 00:27:31,180
g'day Richard lovely to catch up with

652
00:27:36,480 --> 00:27:34,630
you now you're one of the organizers for

653
00:27:39,000 --> 00:27:36,490
the upcoming skeptic on I bet that's

654
00:27:41,010 --> 00:27:39,010
have a busy time for you an exciting

655
00:27:42,030 --> 00:27:41,020
time both exciting and very

656
00:27:43,950 --> 00:27:42,040
nerve-wracking

657
00:27:46,740 --> 00:27:43,960
I really hope we've got a great lineup

658
00:27:48,630 --> 00:27:46,750
that people are really going to enjoy I

659
00:27:51,630 --> 00:27:48,640
know I'm excited about it we're just

660
00:27:54,900 --> 00:27:51,640
waiting for the convention to roll round

661
00:27:56,730 --> 00:27:54,910
in October yeah and then just over a

662
00:27:58,350 --> 00:27:56,740
coffee we were chatting leave the panel

663
00:28:00,210 --> 00:27:58,360

I'm taking part in which is the good

664

00:28:02,700 --> 00:28:00,220

old-fashioned skepticism the ghosties

665

00:28:04,500 --> 00:28:02,710

and the and the paranormal and the spoon

666

00:28:07,500 --> 00:28:04,510

bending and the UFOs and things like

667

00:28:09,210 --> 00:28:07,510

that and the exciting news is Lyn Kelly

668

00:28:10,800 --> 00:28:09,220

will be joining that panel and that's

669

00:28:12,230 --> 00:28:10,810

that's fantastic she wrote a book many

670

00:28:13,730 --> 00:28:12,240

years ago called

671

00:28:15,140 --> 00:28:13,740

oh no what was it called the skeptics

672

00:28:18,140 --> 00:28:15,150

guide to paranormal or something like

673

00:28:19,670 --> 00:28:18,150

that so it's gonna be great lineup

674

00:28:21,650 --> 00:28:19,680

Carrie Poppy's joining us

675

00:28:23,390 --> 00:28:21,660

Beth darling and all sorts of people yes

676

00:28:25,940 --> 00:28:23,400

so riches panel is going to be talking

677

00:28:29,570 --> 00:28:25,950

about that will classic subjects of

678

00:28:35,240 --> 00:28:29,580

skepticism like cold reading and URI

679

00:28:39,020 --> 00:28:35,250

hunting and ghosts - ghosts exists find

680

00:28:41,210 --> 00:28:39,030

out now that that's that's going to be a

681

00:28:44,270 --> 00:28:41,220

fascinating panel and it then I think it

682

00:28:46,220 --> 00:28:44,280

will please a lot of people who remember

683

00:28:47,810 --> 00:28:46,230

the good old days of the Australian

684

00:28:49,730 --> 00:28:47,820

skeptics not that these aren't good old

685

00:28:52,550 --> 00:28:49,740

days - but what I'm talking about that

686

00:28:54,410 --> 00:28:52,560

the wonderful investigations of the UFOs

687

00:28:56,180 --> 00:28:54,420

and monsters and spoon bending and

688

00:28:58,910 --> 00:28:56,190

things like that there's a sense of the

689

00:29:01,340 --> 00:28:58,920

retro here which i think which i think

690

00:29:01,730 --> 00:29:01,350

is a bit of fun a bit of fun for

691

00:29:04,310 --> 00:29:01,740

everyone

692

00:29:06,230 --> 00:29:04,320

and who else do we have coming along I

693

00:29:07,190 --> 00:29:06,240

mean I can think of thing people like a

694

00:29:09,710 --> 00:29:07,200

doctor Karl

695

00:29:11,270 --> 00:29:09,720

yep dr. Karl is someone who's been very

696

00:29:13,040 --> 00:29:11,280

supportive at the skeptics over the

697

00:29:15,770 --> 00:29:13,050

years we're so excited to have him again

698

00:29:18,770 --> 00:29:15,780

as our opener and we're also gonna be

699

00:29:21,350 --> 00:29:18,780

seeing a Pamela gay of the Astronomy

700

00:29:23,270 --> 00:29:21,360

cast as I refer to her the most

701

00:29:28,820 --> 00:29:23,280

beautiful voice in podcasting sorry

702

00:29:32,600 --> 00:29:28,830

Richard first of all enough and we've

703

00:29:34,100 --> 00:29:32,610

also got psy babe who's been on this yep

704

00:29:37,640 --> 00:29:34,110

who's been very critical of the way I

705

00:29:40,460 --> 00:29:37,650

think as some social media influencers

706

00:29:45,500 --> 00:29:40,470

use fake science to promote nutrition

707

00:29:47,120 --> 00:29:45,510

and who was that Alan Duffy of Professor

708

00:29:50,530 --> 00:29:47,130

Alan Duffy who's gonna be talking with

709

00:29:54,950 --> 00:29:50,540

him like a about space the stars

710

00:29:56,360 --> 00:29:54,960

and it's gonna be amazing it really is

711

00:29:58,790 --> 00:29:56,370

it really is uh

712

00:30:01,970 --> 00:29:58,800

anis anytime is a good time to get your

713

00:30:07,310 --> 00:30:01,980

tickets at Convention dot sceptics calm

714

00:30:10,250 --> 00:30:07,320

today you and we hope to offer attendees

715

00:30:12,290 --> 00:30:10,260

some very special services don't we yet

716

00:30:15,520 --> 00:30:12,300

this year we're really looking to make

717

00:30:17,450 --> 00:30:15,530

the event as accessible as possible and

718

00:30:19,760 --> 00:30:17,460

one of the things that we've been

719

00:30:22,340 --> 00:30:19,770

looking into is providing a crash for

720

00:30:25,370 --> 00:30:22,350

families who might otherwise find it

721

00:30:27,260 --> 00:30:25,380

difficult to attend we've been talking

722

00:30:30,310 --> 00:30:27,270

to the venue about providing a nursing

723

00:30:32,410 --> 00:30:30,320

room and we've also been talking about

724

00:30:38,150 --> 00:30:32,420

providing Australian sign language

725

00:30:40,040 --> 00:30:38,160

interpretation services if any of your

726

00:30:41,750 --> 00:30:40,050

listeners Richard would be interested in

727

00:30:44,300 --> 00:30:41,760

accessing these services or have any

728

00:30:47,200 --> 00:30:44,310

other questions we really encourage them

729

00:30:50,210 --> 00:30:47,210

to contact us either via the website or

730

00:30:52,550 --> 00:30:50,220

by calling in to the number at the

731

00:30:54,380 --> 00:30:52,560

australian sceptics website let us know

732

00:30:56,690 --> 00:30:54,390

if this is something that you're

733

00:30:57,980 --> 00:30:56,700

interested in or if you have friends or

734

00:31:00,610 --> 00:30:57,990

family members who might need these

735

00:31:03,170 --> 00:31:00,620

services and we can definitely look at

736

00:31:06,020 --> 00:31:03,180

making it easier for you to attend and

737

00:31:08,000 --> 00:31:06,030

that's on top of the Chatswood concourse

738

00:31:09,500 --> 00:31:08,010

having some really great accessibility

739

00:31:12,050 --> 00:31:09,510

themselves for people with mobility

740

00:31:13,790 --> 00:31:12,060

issues and hearing issues absolutely

741

00:31:16,310 --> 00:31:13,800

right and I think your crisis a

742

00:31:19,490 --> 00:31:16,320

wonderful idea I can't I can't recall

743

00:31:21,950 --> 00:31:19,500

seeing one and a convention before here

744

00:31:24,320 --> 00:31:21,960

or the states where I've been to having

745

00:31:26,000 --> 00:31:24,330

a child minding facility and for those

746

00:31:27,860 --> 00:31:26,010

parents out there who do find it

747

00:31:29,300 --> 00:31:27,870

difficult to get out because they have

748

00:31:33,110 --> 00:31:29,310

to look after little ones I think it's

749

00:31:34,640 --> 00:31:33,120

it's a wonderful opportunity yes so let

750

00:31:37,430 --> 00:31:34,650

us know if this is something you need or

751

00:31:39,230 --> 00:31:37,440

want and mentioning Chatswood of course

752

00:31:41,900 --> 00:31:39,240

and again we were just chatting about it

753

00:31:45,380 --> 00:31:41,910

before the interview chat so it's got to

754

00:31:46,880 --> 00:31:45,390

be one of the most amazing areas for

755

00:31:50,210 --> 00:31:46,890

dining

756

00:31:54,260 --> 00:31:50,220

you can get any food there you are

757

00:31:55,190 --> 00:31:54,270

imagination desires I mean multicultural

758

00:31:57,770 --> 00:31:55,200

cuisine

759

00:32:01,300 --> 00:31:57,780

everywhere you look isn't it Chatswood

760

00:32:04,640 --> 00:32:01,310

really is a gem of Sydney's multi cult

761

00:32:06,820 --> 00:32:04,650

multiculturalism and there's regional

762

00:32:09,560 --> 00:32:06,830

cuisine from all over Asia

763

00:32:12,950 --> 00:32:09,570

you could eat from a different region of

764

00:32:16,310 --> 00:32:12,960

China every day and I'm getting hungry

765

00:32:18,140 --> 00:32:16,320

just even talking about it right now and

766

00:32:20,120 --> 00:32:18,150

we'll be there so folks there's the clue

767

00:32:21,920 --> 00:32:20,130

once again convention dot skeptics

768

00:32:24,230 --> 00:32:21,930

dot-com data you check it out see who's

769

00:32:28,100 --> 00:32:24,240

coming along check out all the speakers

770

00:32:30,380 --> 00:32:28,110

and yeah if you're interested in the

771

00:32:33,410 --> 00:32:30,390

crash service or maybe you'd like some

772

00:32:35,600 --> 00:32:33,420

help with the sign language please let

773

00:32:36,890 --> 00:32:35,610

us know let us know and we'll know if

774

00:32:38,690 --> 00:32:36,900

we're on the right track well

775

00:32:40,250 --> 00:32:38,700

Alethea we've still got a lot of work to

776

00:32:42,860 --> 00:32:40,260

do before the convention rolls around

777

00:32:44,780 --> 00:32:42,870

but it's all looking very exciting yep

778

00:32:46,680 --> 00:32:44,790

see how much I can pawn off to you

779

00:33:07,090 --> 00:32:46,690

Richard

780

00:33:07,570 --> 00:33:07,100

oh hi Trish hi Wow would you like a

781

00:33:08,980 --> 00:33:07,580

coffee

782

00:33:11,470 --> 00:33:08,990

yeah thanks what you're working on

783

00:33:13,530 --> 00:33:11,480

trying to come up with a new promo to

784

00:33:16,390 --> 00:33:13,540

play on the sceptic zone who's it for

785

00:33:18,970 --> 00:33:16,400

the good thinking society in the UK you

786

00:33:20,890 --> 00:33:18,980

know Michael Marshall Simon Singh Norah

787

00:33:22,540 --> 00:33:20,900

Thomas in the background oh yeah I know

788

00:33:24,990 --> 00:33:22,550

them they've been doing some great work

789

00:33:27,700 --> 00:33:25,000

investigating veterinary homeopathy

790

00:33:29,500 --> 00:33:27,710

veterinary homeopathy what you sugarpill

791

00:33:30,940 --> 00:33:29,510

this for cows I know right

792

00:33:32,620 --> 00:33:30,950

and also they're looking at some of the

793

00:33:35,140 --> 00:33:32,630

dodgy medical advice given by UK

794

00:33:37,180 --> 00:33:35,150

chiropractors really okay look I'll

795

00:33:42,210 --> 00:33:37,190

mention all that in the promo now their

796

00:33:44,530 --> 00:33:42,220

website is good thinking society dog and

797

00:33:46,150 --> 00:33:44,540

they've recently been reporting on the

798

00:33:49,270 --> 00:33:46,160

resurgence of faith healer peter Popoff

799

00:33:57,320 --> 00:33:49,280

you know okay look thanks for that it

800

00:33:57,330 --> 00:34:10,290

[Music]

801
00:34:14,800 --> 00:34:12,520
I'm just walking into the Powerhouse

802
00:34:17,260 --> 00:34:14,810
Museum here in Sydney where tonight they

803
00:34:19,210 --> 00:34:17,270
have a speed meet the scientists night a

804
00:34:22,750 --> 00:34:19,220
roomful of scientists you can sit down

805
00:34:24,760 --> 00:34:22,760
and have a chat to many people pairing

806
00:34:27,250 --> 00:34:24,770
many aspects of science many disciplines

807
00:34:28,720 --> 00:34:27,260
and there are so many in fact that I

808
00:34:30,340 --> 00:34:28,730
think this will be a series of

809
00:34:33,190 --> 00:34:30,350
interviews over the next couple of weeks

810
00:34:35,380 --> 00:34:33,200
but if I make my way down this escalator

811
00:34:37,480 --> 00:34:35,390
around the corner there's people milling

812
00:34:40,600 --> 00:34:37,490
about already and I'll head for the room

813
00:34:48,940 --> 00:34:40,610

of scientists for part one of speed meet

814

00:34:50,590 --> 00:34:48,950

the scientists it's meet the scientist

815

00:34:54,159 --> 00:34:50,600

night here at the Powerhouse Museum it's

816

00:34:56,470 --> 00:34:54,169

my first table first scientist I've just

817

00:34:59,410 --> 00:34:56,480

come in before the crowds head your way

818

00:35:02,380 --> 00:34:59,420

hello who do we have here no I'm Camilla

819

00:35:04,330 --> 00:35:02,390

Hoyos and what's your or a creaky table

820

00:35:07,450 --> 00:35:04,340

apart from the creaky table what's your

821

00:35:09,530 --> 00:35:07,460

area sleep so I'm interested in how

822

00:35:12,260 --> 00:35:09,540

sleep affects our health

823

00:35:15,560 --> 00:35:12,270

and how we can improve sleep to also try

824

00:35:17,180 --> 00:35:15,570

and ward off health conditions I think a

825

00:35:19,850 --> 00:35:17,190

lot of my audience would be very

826

00:35:21,770 --> 00:35:19,860

interested I'll tell you something that

827

00:35:23,150 --> 00:35:21,780

I found over the years that helps me

828

00:35:23,720 --> 00:35:23,160

sleep and you've probably heard this

829

00:35:27,020 --> 00:35:23,730

before

830

00:35:32,240 --> 00:35:27,030

there's just listening to podcasts or

831

00:35:34,010 --> 00:35:32,250

something in your ears is similar to

832

00:35:35,990 --> 00:35:34,020

listening to the ocean or the rain on

833

00:35:39,560 --> 00:35:36,000

the roof do you think I guess it could

834

00:35:42,530 --> 00:35:39,570

be so what we know is listening can help

835

00:35:44,870 --> 00:35:42,540

because watching something often can

836

00:35:47,830 --> 00:35:44,880

stop us from falling asleep and having

837

00:35:51,740 --> 00:35:47,840

light near us because that is alert and

838

00:35:54,770 --> 00:35:51,750

can stop our normal rhythms from telling

839

00:35:56,450 --> 00:35:54,780

us how to go to sleep and so it's I

840

00:35:58,810 --> 00:35:56,460

guess it's very individual so some

841

00:36:01,130 --> 00:35:58,820

people might find listening to something

842

00:36:03,290 --> 00:36:01,140

alerting again or it might bring out

843

00:36:05,630 --> 00:36:03,300

something I guess but other people would

844

00:36:08,480 --> 00:36:05,640

find it soothing and you know and a lot

845

00:36:10,070 --> 00:36:08,490

of people do find that they you know you

846

00:36:12,710 --> 00:36:10,080

can get machines and stuff I guess it's

847

00:36:14,210 --> 00:36:12,720

very individual and personal that if you

848

00:36:15,920 --> 00:36:14,220

like to hear something that's repetitive

849

00:36:18,350 --> 00:36:15,930

or if you like to listen to something

850

00:36:20,030 --> 00:36:18,360

but if you're listening and making an

851

00:36:22,250 --> 00:36:20,040

effort to listen then for some people

852

00:36:24,620 --> 00:36:22,260

maybe that would mean that you wouldn't

853

00:36:25,940 --> 00:36:24,630

fall asleep as easily that's why so many

854

00:36:28,970 --> 00:36:25,950

people fall asleep listening to my show

855

00:36:31,730 --> 00:36:28,980

because I'm sure they're listening

856

00:36:33,260 --> 00:36:31,740

intently to what you have to say but did

857

00:36:35,480 --> 00:36:33,270

the rain on the roof is a classic isn't

858

00:36:38,210 --> 00:36:35,490

it it gets it's like a lullaby in a way

859

00:36:40,370 --> 00:36:38,220

yeah and I guess the ocean and I like

860

00:36:42,740 --> 00:36:40,380

that but not everyone will I guess it's

861

00:36:43,850 --> 00:36:42,750

yeah different what's the biggest

862

00:36:45,470 --> 00:36:43,860

problem you've come across in your

863

00:36:46,250 --> 00:36:45,480

research with people trying to get a

864

00:36:49,340 --> 00:36:46,260

good night's sleep

865

00:36:52,340 --> 00:36:49,350

so what I look at is sleep disorders I

866

00:36:56,390 --> 00:36:52,350

see write specific disorders yes yeah so

867

00:36:59,960 --> 00:36:56,400

on mostly sleep apnea so we know sleep

868

00:37:03,140 --> 00:36:59,970

apnea is very common and it results in

869

00:37:05,780 --> 00:37:03,150

people having fragmented or disrupted

870

00:37:07,850 --> 00:37:05,790

sleep because when they go to start to

871

00:37:10,790 --> 00:37:07,860

get into deep sleep they can stop to

872

00:37:12,800 --> 00:37:10,800

stop to breathe and so they can stop and

873

00:37:14,930 --> 00:37:12,810

then they their body has to wake them up

874

00:37:16,710 --> 00:37:14,940

and so even though they're not they

875

00:37:18,720 --> 00:37:16,720

might not know that they're waking up

876

00:37:20,460 --> 00:37:18,730

kind of going to sleep then waking up

877

00:37:22,410 --> 00:37:20,470

and going to sleep and waking up

878

00:37:24,360 --> 00:37:22,420

so these couldn't be you know mean that

879

00:37:25,490 --> 00:37:24,370

we're sleeping the same amount of time

880

00:37:28,140 --> 00:37:25,500

but they're not having a nice

881

00:37:30,020 --> 00:37:28,150

consolidated sleep and so what we're

882

00:37:32,460 --> 00:37:30,030

interested in is how these affects

883

00:37:34,800 --> 00:37:32,470

health outcomes and there's a lot of

884

00:37:37,020 --> 00:37:34,810

research out there to show that people

885

00:37:39,540 --> 00:37:37,030

can be obviously sleepy the next day and

886

00:37:41,220 --> 00:37:39,550

it can affect alertness and function but

887

00:37:43,650 --> 00:37:41,230

there's been a lot of research into if

888

00:37:46,170 --> 00:37:43,660

it can affect our body and our health

889

00:37:48,750 --> 00:37:46,180

and so we've previously looked at its

890

00:37:52,740 --> 00:37:48,760

links with conditions like obesity and

891

00:37:55,800 --> 00:37:52,750

diabetes and now I'm more in the area of

892

00:38:01,470 --> 00:37:55,810

healthy brain aging and cognitive

893

00:38:03,450 --> 00:38:01,480

impairment Wow Wow you're blowing my

894

00:38:05,220 --> 00:38:03,460

mind and I think I've better go and have

895

00:38:06,870 --> 00:38:05,230

a good night's sleep after that and

896

00:38:08,520 --> 00:38:06,880

where if people want to find out more

897

00:38:10,770 --> 00:38:08,530

about what you do I you online

898

00:38:13,530 --> 00:38:10,780

did your work online yes I'm at the

899

00:38:15,000 --> 00:38:13,540

University of Sydney but also at the

900

00:38:17,550 --> 00:38:15,010

wall Koch Institute of medical research

901
00:38:20,460 --> 00:38:17,560
so we have a big sleep group there and

902
00:38:21,930 --> 00:38:20,470
also a sleep clinic a big sleep group I

903
00:38:25,410 --> 00:38:21,940
could just picture it now lots of beds

904
00:38:27,120 --> 00:38:25,420
and everyone just crashes there thank

905
00:38:31,980 --> 00:38:27,130
you very much thank you so much thank

906
00:38:33,750 --> 00:38:31,990
you I was walking past all the

907
00:38:37,020 --> 00:38:33,760
scientists minding my own business when

908
00:38:39,120 --> 00:38:37,030
Abbey appeared that is it's made out of

909
00:38:42,510 --> 00:38:39,130
what pipe cleaners and lots of things an

910
00:38:46,620 --> 00:38:42,520
electric toothbrush pipe cleaners some

911
00:38:51,120 --> 00:38:46,630
modelling clay some recycled from

912
00:38:54,240 --> 00:38:51,130
fabrics and it is a blue band babe which

913
00:38:58,200 --> 00:38:54,250

a buzz pollinators who can vibrate the

914

00:39:00,060 --> 00:38:58,210

head at 350 times per second in order to

915

00:39:00,390 --> 00:39:00,070

shake the pollen out of plants how cool

916

00:39:02,610 --> 00:39:00,400

is that

917

00:39:04,830 --> 00:39:02,620

good grief and who do we have here by

918

00:39:07,080 --> 00:39:04,840

the way my name is Emily Van de stock

919

00:39:09,300 --> 00:39:07,090

I'm a PhD researcher at the university

920

00:39:13,380 --> 00:39:09,310

city and I'm researching the role of

921

00:39:15,630 --> 00:39:13,390

native bees in urban places and what's

922

00:39:16,940 --> 00:39:15,640

the big difference between native bee

923

00:39:19,790 --> 00:39:16,950

and

924

00:39:22,910 --> 00:39:19,800

be the bee we see every day which is not

925

00:39:26,630 --> 00:39:22,920

native am i right yes sir

926

00:39:28,370 --> 00:39:26,640

we have over 1,700 species of native

927

00:39:30,500 --> 00:39:28,380

face ah really

928

00:39:32,750 --> 00:39:30,510

yeah and that's the ones that we know of

929

00:39:35,510 --> 00:39:32,760

this probably so many more

930

00:39:36,829 --> 00:39:35,520

so all these budding budding ecologists

931

00:39:38,960 --> 00:39:36,839

out there if you just keep looking

932

00:39:41,680 --> 00:39:38,970

around the bees and learn some taxonomy

933

00:39:45,940 --> 00:39:41,690

might be able to name your own species

934

00:39:48,560 --> 00:39:45,950

but the honeybee is just one species

935

00:39:51,470 --> 00:39:48,570

that is actually an introduced species

936

00:39:54,410 --> 00:39:51,480

in Australia it's the one that people

937

00:39:56,030 --> 00:39:54,420

would know as the classic be the native

938

00:39:56,210 --> 00:39:56,040

bees make their own honey I guess they

939

00:40:01,760 --> 00:39:56,220

do

940

00:40:04,640 --> 00:40:01,770

Sydney we have a stingless bee called

941

00:40:07,460 --> 00:40:04,650

the Tetragon yellow carbon area and I

942

00:40:09,680 --> 00:40:07,470

say that's so well I kind of think of

943

00:40:11,810 --> 00:40:09,690

them like a pterodactyl in a carbonara

944

00:40:14,720 --> 00:40:11,820

pasta that's one way to remember them

945

00:40:16,520 --> 00:40:14,730

and they do make honey they make this

946

00:40:18,880 --> 00:40:16,530

beautiful lemony honey and they also

947

00:40:22,400 --> 00:40:18,890

have these amazing spiral shaped hives

948

00:40:24,620 --> 00:40:22,410

and do the the bee that we know that is

949

00:40:27,170 --> 00:40:24,630

European is that right yeah the European

950

00:40:29,480 --> 00:40:27,180

honey bee or at the smell liver up is it

951
00:40:32,270 --> 00:40:29,490
science named to its friends right yes

952
00:40:34,640 --> 00:40:32,280
yeah yeah just do its name and is that

953
00:40:38,089 --> 00:40:34,650
been a huge disruption to the local bees

954
00:40:40,400 --> 00:40:38,099
or they all get on famously well sir

955
00:40:44,329 --> 00:40:40,410
the introduced honey bees have been here

956
00:40:48,230 --> 00:40:44,339
for a very long time now and recent

957
00:40:50,180 --> 00:40:48,240
research shows that generally so long as

958
00:40:52,400 --> 00:40:50,190
there's enough flowers and enough of the

959
00:40:54,740 --> 00:40:52,410
food source and habitat for all the bees

960
00:40:57,890 --> 00:40:54,750
to share that they're not really

961
00:41:00,050 --> 00:40:57,900
competing too much so if there's enough

962
00:41:01,579 --> 00:41:00,060
flowers and resources all the bees can

963
00:41:04,280 --> 00:41:01,589

live in harmony but if there's not

964

00:41:06,859 --> 00:41:04,290

enough so if we keep you know with

965

00:41:08,870 --> 00:41:06,869

habitat destruction and development and

966

00:41:11,120 --> 00:41:08,880

not providing enough green spaces that's

967

00:41:12,200 --> 00:41:11,130

when we might be seeing some competitive

968

00:41:14,810 --> 00:41:12,210

things happening

969

00:41:16,130 --> 00:41:14,820

but this is all like research that's

970

00:41:19,760 --> 00:41:16,140

happening at the moment so watch that

971

00:41:21,470 --> 00:41:19,770

space cutting-edge research about bees

972

00:41:23,660 --> 00:41:21,480

thank you very much has been very

973

00:41:25,970 --> 00:41:23,670

interesting I shall look up Australian

974

00:41:31,310 --> 00:41:25,980

bees yeah and definitely check out the

975

00:41:34,190 --> 00:41:31,320

blue band Bay 350 per second emeritus

976
00:41:35,960 --> 00:41:34,200
buzzing amazing beautiful native babe

977
00:41:37,730 --> 00:41:35,970
and if people want to find out more

978
00:41:39,849 --> 00:41:37,740
about your particular researcher you

979
00:41:43,970 --> 00:41:39,859
online anywhere yes you can go to

980
00:41:46,130 --> 00:41:43,980
cross-pollinating org and it's about

981
00:41:48,410 --> 00:41:46,140
cross pollinating community ecology

982
00:41:50,839 --> 00:41:48,420
citizen science native bees in the city

983
00:41:56,810 --> 00:41:50,849
I love that thank you very much thank

984
00:41:58,849 --> 00:41:56,820
you so much come to another table and

985
00:42:01,250 --> 00:41:58,859
who do we have here I'm Alex Thompson

986
00:42:03,829 --> 00:42:01,260
from jcrane biotech hub at UTSA and

987
00:42:06,620 --> 00:42:03,839
what's your area why you here what you

988
00:42:08,990 --> 00:42:06,630

want to tell people so I am first and

989

00:42:11,570 --> 00:42:09,000

foremost a marine ecologist but what I'm

990

00:42:13,520 --> 00:42:11,580

doing now is looking at algae biotech

991

00:42:14,990 --> 00:42:13,530

and how we can use algae biotech to

992

00:42:18,980 --> 00:42:15,000

change the face of a whole bunch of

993

00:42:20,750 --> 00:42:18,990

industries how so so algae more

994

00:42:22,250 --> 00:42:20,760

specifically microalgae is this really

995

00:42:25,130 --> 00:42:22,260

amazing organism that we can pull

996

00:42:26,960 --> 00:42:25,140

proteins and fats and all sorts of

997

00:42:29,150 --> 00:42:26,970

sugars and stuff out of and use it to

998

00:42:31,579 --> 00:42:29,160

make things like plastics use it for

999

00:42:32,960 --> 00:42:31,589

things in agriculture and aquaculture we

1000

00:42:34,900 --> 00:42:32,970

can use it to make pharmaceuticals

1001

00:42:39,140 --> 00:42:34,910

vaccinations nutraceuticals

1002

00:42:41,270 --> 00:42:39,150

so I managed this degree in biotech hub

1003

00:42:43,339 --> 00:42:41,280

which we are basically kind of promoting

1004

00:42:44,660 --> 00:42:43,349

algae as the next frontier across a

1005

00:42:46,700 --> 00:42:44,670

bunch of different industries and

1006

00:42:49,339 --> 00:42:46,710

helping to educate engage with people

1007

00:42:52,010 --> 00:42:49,349

about just how amazing it is and what

1008

00:42:54,440 --> 00:42:52,020

led you to this branch of research it's

1009

00:42:57,920 --> 00:42:54,450

what should I say it's not exactly

1010

00:42:59,990 --> 00:42:57,930

obscure but it's a little unusual so as

1011

00:43:02,000 --> 00:43:00,000

I say I do my PhD in marine ecology and

1012

00:43:04,700 --> 00:43:02,010

I did it within a Research Institute

1013

00:43:05,870 --> 00:43:04,710

that had a really diverse an amazing

1014

00:43:08,089 --> 00:43:05,880

group of researchers that were

1015

00:43:10,910 --> 00:43:08,099

researching everything from like seafood

1016

00:43:14,210 --> 00:43:10,920

safety to corals to really hardcore sort

1017

00:43:15,500 --> 00:43:14,220

of biotech type things and the Research

1018

00:43:16,730 --> 00:43:15,510

Institute came up with an opportunity

1019

00:43:18,410 --> 00:43:16,740

that was presented by a department of

1020

00:43:20,720 --> 00:43:18,420

industry to create this le biotech hub

1021

00:43:22,850 --> 00:43:20,730

and I was there and just saw it as an

1022

00:43:24,260 --> 00:43:22,860

amazing opportunity not only you know

1023

00:43:25,760 --> 00:43:24,270

this is kind of a scientists dream you

1024

00:43:28,160 --> 00:43:25,770

know it's it's taking something that's

1025

00:43:29,180 --> 00:43:28,170

sustainable and biological and showing

1026

00:43:30,920 --> 00:43:29,190

it to people and saying look at this

1027

00:43:33,290 --> 00:43:30,930

amazing thing look what it can do and

1028

00:43:36,200 --> 00:43:33,300

you know really potentially having a

1029

00:43:38,090 --> 00:43:36,210

massive impact on things around us and

1030

00:43:40,730 --> 00:43:38,100

what has taken you by surprise in your

1031

00:43:42,860 --> 00:43:40,740

research anything in particular I just

1032

00:43:45,380 --> 00:43:42,870

think the diverse range of applications

1033

00:43:46,790 --> 00:43:45,390

that something like this can have I

1034

00:43:48,920 --> 00:43:46,800

think that we are really at the

1035

00:43:50,960 --> 00:43:48,930

forefront and you know there is there is

1036

00:43:53,180 --> 00:43:50,970

massive potential for so many things to

1037

00:43:54,560 --> 00:43:53,190

change because of this we're wanting to

1038

00:43:56,090 --> 00:43:54,570

make our world more sustainable wanting

1039

00:43:58,580 --> 00:43:56,100

to make industries more sustainable and

1040

00:44:00,530 --> 00:43:58,590

this presents such an opportunity across

1041

00:44:02,630 --> 00:44:00,540

such a wide range of industries and

1042

00:44:03,860 --> 00:44:02,640

spaces and I don't think we've ever seen

1043

00:44:05,930 --> 00:44:03,870

something like this before

1044

00:44:09,980 --> 00:44:05,940

and you can eat it and you can eat it

1045

00:44:11,240 --> 00:44:09,990

absolutely that's absolutely first thing

1046

00:44:20,450 --> 00:44:11,250

well thank you very much and all the

1047

00:44:25,580 --> 00:44:20,460

best of your research Thank You Frankie

1048

00:44:28,220 --> 00:44:25,590

Lee hello hi I've just been meeting

1049

00:44:29,990 --> 00:44:28,230

every sign - oh I've still got some more

1050

00:44:30,470 --> 00:44:30,000

to go I think but so many fascinating

1051
00:44:32,810 --> 00:44:30,480
people

1052
00:44:34,520 --> 00:44:32,820
now you're really responsible for

1053
00:44:35,570 --> 00:44:34,530
putting this wonderful speed meet the

1054
00:44:38,090 --> 00:44:35,580
scientists night together

1055
00:44:40,820 --> 00:44:38,100
I am yeah I've been doing this since we

1056
00:44:43,370 --> 00:44:40,830
did the first one in 2006 at the ultimo

1057
00:44:45,770 --> 00:44:43,380
Science Festival at ABC and it's

1058
00:44:53,000 --> 00:44:45,780
happened every year since then what you

1059
00:44:54,860 --> 00:44:53,010
use it so that's 12 years we must say -

1060
00:44:56,210 --> 00:44:54,870
I mean this is the powerhouse museum and

1061
00:44:58,010 --> 00:44:56,220
other areas open and there's lots of

1062
00:44:59,690 --> 00:44:58,020
people sort of mingling but they do find

1063
00:45:01,160 --> 00:44:59,700

their way here to the room of scientists

1064

00:45:03,200 --> 00:45:01,170

and we look around now and there are

1065

00:45:04,970 --> 00:45:03,210

tables set up everywhere and they're

1066

00:45:07,160 --> 00:45:04,980

more and more people coming sitting with

1067

00:45:08,990 --> 00:45:07,170

the scientists having a chat learning

1068

00:45:10,730 --> 00:45:09,000

all sorts of things it's a really great

1069

00:45:13,310 --> 00:45:10,740

initiative and I wouldn't be surprised

1070

00:45:16,730 --> 00:45:13,320

Frank E if this is copied all around the

1071

00:45:18,080 --> 00:45:16,740

world well I think it it has taken off

1072

00:45:19,550 --> 00:45:18,090

you here bet people doing this and they

1073

00:45:21,560 --> 00:45:19,560

think it's just a normal thing to do now

1074

00:45:24,200 --> 00:45:21,570

so it used to be kind of unusual idea

1075

00:45:26,240 --> 00:45:24,210

and usually once the place is filled

1076
00:45:27,700 --> 00:45:26,250
with customers talking to scientists you

1077
00:45:29,440 --> 00:45:27,710
can't stop them

1078
00:45:31,510 --> 00:45:29,450
in fact I try to ring the bell and get

1079
00:45:33,700 --> 00:45:31,520
them to move on you can't get them they

1080
00:45:35,470 --> 00:45:33,710
just all we're just Chat Chat Chat the

1081
00:45:37,599 --> 00:45:35,480
scientists won't stop to eat or drink

1082
00:45:39,849 --> 00:45:37,609
we're thinking getting like glucose

1083
00:45:43,329 --> 00:45:39,859
intravenous drips for them to get them

1084
00:45:44,859 --> 00:45:43,339
going for the three hours it's a

1085
00:45:47,140 --> 00:45:44,869
wonderful thing thank you it's a great

1086
00:45:50,920 --> 00:45:47,150
sign well you know what I'm going to

1087
00:45:55,210 --> 00:45:50,930
dive in and see if I can't just check to

1088
00:45:57,700 --> 00:45:55,220

a few more and now we're still keeping

1089

00:46:00,040 --> 00:45:57,710

with the marine theme here and who do we

1090

00:46:02,470 --> 00:46:00,050

have my name is Cara and I'm a PhD

1091

00:46:04,270 --> 00:46:02,480

student at the University of Sydney and

1092

00:46:06,099 --> 00:46:04,280

why are you here what you want to talk

1093

00:46:09,460 --> 00:46:06,109

to people about I want to talk to people

1094

00:46:11,140 --> 00:46:09,470

about crustaceans and why taxonomy and

1095

00:46:14,140 --> 00:46:11,150

systematics is important for

1096

00:46:16,630 --> 00:46:14,150

conservation and how we can use fossils

1097

00:46:19,059 --> 00:46:16,640

and by geographical events to determine

1098

00:46:20,410 --> 00:46:19,069

how old these groups are it's

1099

00:46:25,299 --> 00:46:20,420

interesting because right in front of me

1100

00:46:27,400 --> 00:46:25,309

on the desk here we have I think I've

1101
00:46:29,470 --> 00:46:27,410
broken your crustacean what is that one

1102
00:46:32,950 --> 00:46:29,480
I'm looking at this this is a mantis

1103
00:46:36,520 --> 00:46:32,960
shrimp so that does come off yes it's a

1104
00:46:39,220 --> 00:46:36,530
mallard cost rican crustacean so they

1105
00:46:40,809 --> 00:46:39,230
contain your crabs in your Decker pods

1106
00:46:42,130 --> 00:46:40,819
so it's a specific group within

1107
00:46:45,490 --> 00:46:42,140
crustacean known as the higher

1108
00:46:48,130 --> 00:46:45,500
crustaceans and these guys are steamed

1109
00:46:50,140 --> 00:46:48,140
out of pods and you've probably heard of

1110
00:46:52,299 --> 00:46:50,150
them on David Attenborough these are the

1111
00:46:53,559 --> 00:46:52,309
guys that you sort of don't want to keep

1112
00:46:55,960 --> 00:46:53,569
in aquariums and you don't want to get

1113
00:46:59,170 --> 00:46:55,970

too close to because they have a strike

1114

00:47:01,390 --> 00:46:59,180

on using these appendages here which

1115

00:47:04,630 --> 00:47:01,400

exhibits a force similar to that of a 22

1116

00:47:07,780 --> 00:47:04,640

caliber bullet so them right now you've

1117

00:47:10,480 --> 00:47:07,790

mentioned it yes I've seen the videos of

1118

00:47:12,910 --> 00:47:10,490

these little creatures unleashing an

1119

00:47:14,950 --> 00:47:12,920

incredible punch isn't it yes it's

1120

00:47:17,559 --> 00:47:14,960

incredible and they're very small and

1121

00:47:20,170 --> 00:47:17,569

they have this cavitation bubble and

1122

00:47:21,819 --> 00:47:20,180

yeah it's an or its enormous ly fast

1123

00:47:23,530 --> 00:47:21,829

it's actually they hold the record for

1124

00:47:26,589 --> 00:47:23,540

the fastest punch in the animal kingdom

1125

00:47:27,819 --> 00:47:26,599

it's it's insanely fast and you don't

1126
00:47:29,500 --> 00:47:27,829
want them to hit you because the bigger

1127
00:47:30,970 --> 00:47:29,510
species they can actually break your

1128
00:47:35,030 --> 00:47:30,980
finger so

1129
00:47:37,580 --> 00:47:35,040
yes I have a pet at home and fortunately

1130
00:47:39,920 --> 00:47:37,590
she's not too big but she has nipped me

1131
00:47:44,180 --> 00:47:39,930
a couple of times and it's it's

1132
00:47:46,220 --> 00:47:44,190
definitely scary yes Wow Wow

1133
00:47:47,450 --> 00:47:46,230
and no it's great because right in front

1134
00:47:49,790 --> 00:47:47,460
of me here you have other things on the

1135
00:47:52,280 --> 00:47:49,800
table big wonderful color photograph and

1136
00:47:53,420 --> 00:47:52,290
a little diagram here of other little

1137
00:47:54,589 --> 00:47:53,430
creatures but I love the little model

1138
00:47:57,140 --> 00:47:54,599

here that looks fantastic

1139

00:47:58,940 --> 00:47:57,150

that's life-size is it there are species

1140

00:48:00,530 --> 00:47:58,950

that are about that size so they range

1141

00:48:02,900 --> 00:48:00,540

from you know from about a centimeter to

1142

00:48:05,240 --> 00:48:02,910

over 30 centimeters so it's quite a

1143

00:48:07,099 --> 00:48:05,250

broad spectrum actually of size yeah oh

1144

00:48:08,930 --> 00:48:07,109

all the best and then don't get punched

1145

00:48:10,430 --> 00:48:08,940

out too often huh yes that's very true

1146

00:48:14,630 --> 00:48:10,440

don't want to run into one in a dark

1147

00:48:16,730 --> 00:48:14,640

alley thank you thank you that was part

1148

00:48:18,710 --> 00:48:16,740

one of speed meet the scientists at the

1149

00:48:20,839 --> 00:48:18,720

Powerhouse Museum play of signs week

1150

00:48:26,340 --> 00:48:20,849

tune in next week to the skipping zone

1151

00:48:42,330 --> 00:48:40,320

[Music]

1152

00:48:45,030 --> 00:48:42,340

this is Kyle from the data skeptic

1153

00:48:47,400 --> 00:48:45,040

podcast if you're curious about the way

1154

00:48:49,860 --> 00:48:47,410

data is changing our world topics like

1155

00:48:52,440 --> 00:48:49,870

AI and all this craziness with Facebook

1156

00:48:54,240 --> 00:48:52,450

and BOTS and the Twitter storm and how

1157

00:48:56,310 --> 00:48:54,250

the algorithms that underline that work

1158

00:48:57,900 --> 00:48:56,320

and you don't want a technical deep dive

1159

00:48:59,310 --> 00:48:57,910

you want it you know in the vernacular

1160

00:49:01,020 --> 00:48:59,320

in a way that people can understand

1161

00:49:03,090 --> 00:49:01,030

check us out at data skeptic that's what

1162

00:49:04,950 --> 00:49:03,100

we try and do I interview advanced

1163

00:49:06,660 --> 00:49:04,960

professionals in the field who do this

1164

00:49:11,310 --> 00:49:06,670

sort of research and then I get into

1165

00:49:13,110 --> 00:49:11,320

interesting projects as well we're a

1166

00:49:44,250 --> 00:49:13,120

weekly show and you can find this data

1167

00:49:46,070 --> 00:49:44,260

skeptic calm I'm a writer I research

1168

00:49:48,360 --> 00:49:46,080

last year I had a book come out called

1169

00:49:50,430 --> 00:49:48,370

the secret code breakers of Central

1170

00:49:51,930 --> 00:49:50,440

Bureau which was basically history of

1171

00:49:53,960 --> 00:49:51,940

Australian code breaking in signals

1172

00:49:58,230 --> 00:49:53,970

intelligence in the Second World War

1173

00:50:00,150 --> 00:49:58,240

currently I'm writing a book on a very

1174

00:50:02,730 --> 00:50:00,160

well sort of a tangential topic to that

1175

00:50:05,430 --> 00:50:02,740

one on a woman called Florence Bart

1176

00:50:13,080 --> 00:50:05,440

Mackenzie so who was Florence Mackenzie

1177

00:50:15,990 --> 00:50:13,090

well she was a pretty amazing person in

1178

00:50:17,970 --> 00:50:16,000

that she was Australia's first female

1179

00:50:23,520 --> 00:50:17,980

electrical engineer she got her diploma

1180

00:50:25,980 --> 00:50:23,530

in 1923 and when war broke out in other

1181

00:50:27,990 --> 00:50:25,990

when the Second World War started she

1182

00:50:30,240 --> 00:50:28,000

was still Australia's only female

1183

00:50:32,760 --> 00:50:30,250

electrical engineer so she's

1184

00:50:35,580 --> 00:50:32,770

historically significant on that Ally

1185

00:50:39,480 --> 00:50:35,590

she also was very involved in the early

1186

00:50:41,730 --> 00:50:39,490

radio industry and getting radio and

1187

00:50:43,030 --> 00:50:41,740

wireless up and running in in Australia

1188

00:50:45,070 --> 00:50:43,040

she yeah

1189

00:50:46,750 --> 00:50:45,080

magazine called Wireless weekly which

1190

00:50:49,390 --> 00:50:46,760

turned into a publishing juggernaut

1191

00:50:51,730 --> 00:50:49,400

she wasn't inventor she was a poet she

1192

00:50:53,980 --> 00:50:51,740

started a shot called the wireless shot

1193

00:50:55,990 --> 00:50:53,990

was turned into an enormous retail

1194

00:50:58,500 --> 00:50:56,000

business ended up getting bought out by

1195

00:51:00,880 --> 00:50:58,510

I think RadioShack something like that

1196

00:51:03,250 --> 00:51:00,890

that might not be right but anyway so

1197

00:51:05,320 --> 00:51:03,260

she she did a lot of amazing things but

1198

00:51:07,300 --> 00:51:05,330

the biggest life accomplishment was

1199

00:51:09,850 --> 00:51:07,310

really during the Second World War she

1200

00:51:14,950 --> 00:51:09,860

trained thousands of women and men in

1201

00:51:16,750 --> 00:51:14,960

Morse code and signals Morse code was a

1202

00:51:18,070 --> 00:51:16,760

very big part of the sort of

1203

00:51:19,930 --> 00:51:18,080

communications infrastructure of the

1204

00:51:22,330 --> 00:51:19,940

country it's not now but it was then and

1205

00:51:23,380 --> 00:51:22,340

and she saw the war was probably gonna

1206

00:51:24,730 --> 00:51:23,390

happen and thought you know what they

1207

00:51:26,230 --> 00:51:24,740

get a run out of people who can do this

1208

00:51:28,240 --> 00:51:26,240

stuff but not just Morse put all sorts

1209

00:51:31,120 --> 00:51:28,250

of signaling and to leg release skills

1210

00:51:32,530 --> 00:51:31,130

so she just offer I'm back didn't ask

1211

00:51:34,810 --> 00:51:32,540

for permission no government money

1212

00:51:37,120 --> 00:51:34,820

nothing just started a school in Sydney

1213

00:51:39,490 --> 00:51:37,130

anybody who wants to come on learn Morse

1214

00:51:41,770 --> 00:51:39,500

code come on and so she got all these

1215

00:51:43,720 --> 00:51:41,780

women coming along and learning Morse

1216

00:51:47,040 --> 00:51:43,730

code and something sure enough she was

1217

00:51:49,840 --> 00:51:47,050

right and the military ran out of people

1218

00:51:52,180 --> 00:51:49,850

who could use signals people and they

1219

00:51:53,710 --> 00:51:52,190

were appealing to the public and so she

1220

00:51:55,780 --> 00:51:53,720

went to them and went to the government

1221

00:51:57,880 --> 00:51:55,790

and she said I've trained 2,000 women in

1222

00:52:00,460 --> 00:51:57,890

this stuff up to the standards required

1223

00:52:06,070 --> 00:52:00,470

by the military do you want them oh and

1224

00:52:07,720 --> 00:52:06,080

they said no maybe to take them but um

1225

00:52:10,810 --> 00:52:07,730

she was responsible for getting women to

1226
00:52:12,610 --> 00:52:10,820
the into the Navy and you know there's

1227
00:52:15,040 --> 00:52:12,620
much beloved by all the people that went

1228
00:52:17,830 --> 00:52:15,050
through her signal schools for people

1229
00:52:19,480 --> 00:52:17,840
listening the connection with central

1230
00:52:21,820 --> 00:52:19,490
bureau which was a code-breaking in the

1231
00:52:25,060 --> 00:52:21,830
signals intelligence operation was that

1232
00:52:27,730 --> 00:52:25,070
many of the people even that mrs. Mac

1233
00:52:30,250 --> 00:52:27,740
trained ended up going into intelligence

1234
00:52:32,620 --> 00:52:30,260
operations in Australia and working for

1235
00:52:34,890 --> 00:52:32,630
intelligence organisations because of

1236
00:52:36,790 --> 00:52:34,900
their skills with wireless and and Morse

1237
00:52:38,320 --> 00:52:36,800
so that's the connection and that's

1238
00:52:40,210 --> 00:52:38,330

actually how I discovered her I was

1239

00:52:42,760 --> 00:52:40,220

writing this book on Australian code

1240

00:52:45,490 --> 00:52:42,770

breakers and she wasn't really part of

1241

00:52:48,190 --> 00:52:45,500

the code breaking story she's sort of

1242

00:52:49,499 --> 00:52:48,200

tangential to that anyway there was so

1243

00:52:50,819 --> 00:52:49,509

much interest in that chapter

1244

00:52:52,679 --> 00:52:50,829

but we'll say that I think the

1245

00:52:54,659 --> 00:52:52,689

codebreakers say that she deserves her

1246

00:52:56,279 --> 00:52:54,669

own book yeah I mean she had all these

1247

00:52:58,739 --> 00:52:56,289

innovative technique techniques for

1248

00:53:00,389 --> 00:52:58,749

training people and well she used music

1249

00:53:02,429 --> 00:53:00,399

to teach people so she'd have the teddy

1250

00:53:04,049 --> 00:53:02,439

bears picnic playing so maybe you're

1251

00:53:05,969 --> 00:53:04,059

tapping the amour skis to the teddy

1252

00:53:09,269 --> 00:53:05,979

bears picnic and she had all these cool

1253

00:53:10,829 --> 00:53:09,279

funny rhymes that you have to teach you

1254

00:53:14,370 --> 00:53:10,839

and talk about some of those fries oh

1255

00:53:15,929 --> 00:53:14,380

yes sure it's actually fun meeting

1256

00:53:17,099 --> 00:53:15,939

people who trained with her and trying

1257

00:53:19,999 --> 00:53:17,109

to piece together I don't know if

1258

00:53:22,979 --> 00:53:20,009

there's a complete alphabet of mrs. neck

1259

00:53:24,209 --> 00:53:22,989

mnemonics but I like to think there is

1260

00:53:26,359 --> 00:53:24,219

I'm tracking at all the different

1261

00:53:28,049 --> 00:53:26,369

letters of the alphabet so for instance

1262

00:53:30,259 --> 00:53:28,059

in Morse code

1263

00:53:34,620 --> 00:53:30,269

which is basically just dots and dashes

1264

00:53:37,439 --> 00:53:34,630

the letter Q goes dah dah dah

1265

00:53:39,269 --> 00:53:37,449

it's a and so we got all these young

1266

00:53:41,939 --> 00:53:39,279

women and trying to learn that and so

1267

00:53:44,429 --> 00:53:41,949

she'd say it sounds like he comes the

1268

00:53:49,859 --> 00:53:44,439

bride so they instead of Q is here comes

1269

00:53:52,109 --> 00:53:49,869

the bride there's a letter v ah did ah

1270

00:53:54,809 --> 00:53:52,119

she said oh well that's music as well

1271

00:53:57,569 --> 00:53:54,819

that's just because V looks like the new

1272

00:54:01,139 --> 00:53:57,579

remi new miller glitter 4/5 that's

1273

00:54:03,539 --> 00:54:01,149

Beethoven's fifth Dada and say feel

1274

00:54:07,649 --> 00:54:03,549

anymore you're never gonna get to get ve

1275

00:54:09,719 --> 00:54:07,659

bean they'd open space where to be so

1276

00:54:12,389 --> 00:54:09,729

these are some of the things she did she

1277

00:54:14,129 --> 00:54:12,399

had a lot of interesting tricks for

1278

00:54:16,769 --> 00:54:14,139

teaching people and I think she's

1279

00:54:19,259 --> 00:54:16,779

actually really my Australia's great

1280

00:54:21,870 --> 00:54:19,269

teachers period you know real innovator

1281

00:54:23,609 --> 00:54:21,880

in terms of training in teaching what

1282

00:54:25,409 --> 00:54:23,619

else did she do you mentioned quite a

1283

00:54:29,969 --> 00:54:25,419

few other activities what did she do say

1284

00:54:31,949 --> 00:54:29,979

after the war during the war her signal

1285

00:54:34,499 --> 00:54:31,959

school just got bigger and bigger so you

1286

00:54:36,359 --> 00:54:34,509

know she trained these women and in the

1287

00:54:39,329 --> 00:54:36,369

Navy city s we'd like the women and then

1288

00:54:40,450 --> 00:54:39,339

the Air Force and then they realized

1289

00:54:42,730 --> 00:54:40,460

they didn't have anybody to train

1290

00:54:44,859 --> 00:54:42,740

men going into the signals units and so

1291

00:54:47,050 --> 00:54:44,869

forth so and and for the Air Force

1292

00:54:49,599 --> 00:54:47,060

so her women that she trapped her they

1293

00:54:51,849 --> 00:54:49,609

almost just work you know office workers

1294

00:54:55,000 --> 00:54:51,859

in Sydney these young women or even even

1295

00:54:56,620 --> 00:54:55,010

you know just late teens and early 20s

1296

00:54:59,470 --> 00:54:56,630

they were ended up training all the men

1297

00:55:02,560 --> 00:54:59,480

all that all that all the recruits for

1298

00:55:04,839 --> 00:55:02,570

the Australian Air Force the Navy the

1299

00:55:08,380 --> 00:55:04,849

house of 10,000 men they trained these

1300

00:55:10,420 --> 00:55:08,390

these women and then but then after the

1301

00:55:11,980 --> 00:55:10,430

war the whole thing went down and then

1302

00:55:14,050 --> 00:55:11,990

all these veterans started coming back

1303

00:55:16,450 --> 00:55:14,060

and they didn't have jobs so she was

1304

00:55:19,359 --> 00:55:16,460

training she started training some of

1305

00:55:20,710 --> 00:55:19,369

the men she trained before you know guys

1306

00:55:23,310 --> 00:55:20,720

who've learned all these skills in the

1307

00:55:26,710 --> 00:55:23,320

Air Force to become commercial pilots

1308

00:55:28,120 --> 00:55:26,720

and training them to become merchant

1309

00:55:29,650 --> 00:55:28,130

sailors and stuff like this because they

1310

00:55:32,829 --> 00:55:29,660

still needed to learn all of the skills

1311

00:55:36,370 --> 00:55:32,839

involved in in signals so she did that

1312

00:55:37,599 --> 00:55:36,380

until about 1950 - yeah so she did

1313

00:55:39,609 --> 00:55:37,609

different a number of years and then she

1314

00:55:42,400 --> 00:55:39,619

retired they used to be mixed some

1315

00:55:44,710 --> 00:55:42,410

people who knew her what were they roles

1316

00:55:47,440 --> 00:55:44,720

descriptions of her well it's funny like

1317

00:55:49,240 --> 00:55:47,450

I will okay so so there's a few things

1318

00:55:53,170 --> 00:55:49,250

that everybody seems to say she was

1319

00:55:55,900 --> 00:55:53,180

lovely she was amazing and she was very

1320

00:55:58,329 --> 00:55:55,910

very short term I don't know why they

1321

00:56:02,650 --> 00:55:58,339

always mention that so it's been good so

1322

00:56:05,560 --> 00:56:02,660

I'd only found four people who knew her

1323

00:56:08,920 --> 00:56:05,570

in person at various times you know a

1324

00:56:10,720 --> 00:56:08,930

one was a just relative and just

1325

00:56:13,990 --> 00:56:10,730

different people who actually met her in

1326
00:56:15,700 --> 00:56:14,000
some way I've actually discovered many

1327
00:56:17,079 --> 00:56:15,710
other people who knew her and were

1328
00:56:19,270 --> 00:56:17,089
trained by her and it's been just really

1329
00:56:23,950 --> 00:56:19,280
great meeting them and hearing hearing

1330
00:56:26,349 --> 00:56:23,960
the story about her well that's a really

1331
00:56:28,540 --> 00:56:26,359
impressive story if any of our listeners

1332
00:56:29,260 --> 00:56:28,550
want to get in contact with you how can

1333
00:56:31,210 --> 00:56:29,270
you be reached

1334
00:56:33,070 --> 00:56:31,220
oh by email I guess is the simplest

1335
00:56:38,349 --> 00:56:33,080
thing you David duck dia Gmail comments

1336
00:56:40,900 --> 00:56:38,359
div ID d u f t y no dots or anything at

1337
00:56:42,170 --> 00:56:40,910
gmail.com and as duf t why a lot of

1338
00:56:46,510 --> 00:56:42,180

people duck

1339

00:56:48,290 --> 00:56:46,520

is my name duck yeah so you can email me

1340

00:56:50,750 --> 00:56:48,300

about to hear from you if you know

1341

00:56:52,640 --> 00:56:50,760

anything about mrs. Mehta was you know

1342

00:56:53,840 --> 00:56:52,650

signals trading in the Second World War

1343

00:56:55,730 --> 00:56:53,850

or anything like that or if you've got

1344

00:56:58,400 --> 00:56:55,740

any amazing stories about code breaking

1345

00:57:01,040 --> 00:56:58,410

in the Second World War as well a lovely

1346

00:57:02,570 --> 00:57:01,050

performance I know there are well David

1347

00:57:04,160 --> 00:57:02,580

daddy thank you very much

1348

00:57:22,420 --> 00:57:04,170

Thanksgiving

1349

00:57:27,530 --> 00:57:24,770

thank you for listening to the skeptic

1350

00:57:30,200 --> 00:57:27,540

zone next week even more scientists peed

1351

00:57:32,780 --> 00:57:30,210

meeting and Maynard chats to lots of

1352

00:57:35,570 --> 00:57:32,790

other scientists as well more scientists

1353

00:57:37,250 --> 00:57:35,580

than you can poke a test-tube at why

1354

00:57:39,440 --> 00:57:37,260

you'd want to do that I don't know and

1355

00:57:41,810 --> 00:57:39,450

speaking of more scientists then you can

1356

00:57:44,540 --> 00:57:41,820

poke a test-tube at you'll be meeting

1357

00:57:47,599 --> 00:57:44,550

lots of those people and all sorts of

1358

00:57:49,460 --> 00:57:47,609

skeptics and doctors at the Australian

1359

00:57:51,740 --> 00:57:49,470

skeptics National Convention skeptic on

1360

00:57:53,359 --> 00:57:51,750

coming up later in the all very soon we

1361

00:57:56,000 --> 00:57:53,369

keep saying later in the year but

1362

00:57:57,560 --> 00:57:56,010

actually it's very soon now and if you

1363

00:57:59,900 --> 00:57:57,570

haven't bought your tickets yet now's

1364

00:58:01,609 --> 00:57:59,910

the time to do it it helps with numbers

1365

00:58:04,010 --> 00:58:01,619

and not planning and organizing and all

1366

00:58:06,950 --> 00:58:04,020

sorts of things I went to the venue with

1367

00:58:09,260 --> 00:58:06,960

Alethea Dean just a few days ago

1368

00:58:11,900 --> 00:58:09,270

Alethea Maynard and I went there to make

1369

00:58:14,359 --> 00:58:11,910

a promotional video and it's superb the

1370

00:58:16,370 --> 00:58:14,369

concourse at Chatswood now I'm very

1371

00:58:18,980 --> 00:58:16,380

excited to tell you that coming up on

1372

00:58:21,170 --> 00:58:18,990

next week's show we have an interview

1373

00:58:24,680 --> 00:58:21,180

with Stephen Barrett the man behind

1374

00:58:26,329 --> 00:58:24,690

quack watch quack watch.org now you'll

1375

00:58:27,859 --> 00:58:26,339

hear promotions in fact on this week's

1376

00:58:30,380 --> 00:58:27,869

episode you heard the promotion for

1377

00:58:32,990 --> 00:58:30,390

quack watch I've been visiting the site

1378

00:58:35,930 --> 00:58:33,000

for years to find out information about

1379

00:58:39,950 --> 00:58:35,940

homeopathy chiropractic acupuncture and

1380

00:58:41,750 --> 00:58:39,960

on and on and on so I am delighted and

1381

00:58:44,180 --> 00:58:41,760

honored to bring you next week and

1382

00:58:45,829 --> 00:58:44,190

interview with Stephen Barrett thank you

1383

00:58:48,079 --> 00:58:45,839

to those people who contribute to the

1384

00:58:50,000 --> 00:58:48,089

sceptic zone via PayPal or patreon I'm

1385

00:58:52,220 --> 00:58:50,010

getting so much use out of the new

1386

00:58:54,589 --> 00:58:52,230

microphone the yellow tech eye XM and I

1387

00:58:57,800 --> 00:58:54,599

can only do that because of the generous

1388

00:59:01,190 --> 00:58:57,810

and kind contributions from skeptic zone

1389

00:59:03,320 --> 00:59:01,200

listeners and also just lately I am able

1390

00:59:05,839 --> 00:59:03,330

to help Maine out out with some new bits

1391

00:59:08,750 --> 00:59:05,849

and pieces and equipment and that's all

1392

00:59:11,950 --> 00:59:08,760

very much appreciated and I hope it

1393

00:59:14,750 --> 00:59:11,960

helps to bring you a better skeptic zone

1394

00:59:16,520 --> 00:59:14,760

but for this week this is Richard

1395

00:59:21,280 --> 00:59:16,530

Saunders signing off from Sydney

1396

00:59:26,610 --> 00:59:23,710

you've been listening to the skeptic

1397

00:59:33,310 --> 00:59:26,620

zone podcast please visit our website at

1398

00:59:36,810 --> 00:59:33,320

wwlp.com tax and to access the bat

1399

00:59:39,460 --> 00:59:36,820

catalog of episodes going back to 2008

1400

00:59:42,760 --> 00:59:39,470

you can follow the skeptic zone podcast

1401
00:59:45,040 --> 00:59:42,770
on twitter at skeptic zone visit our

1402
00:59:45,930 --> 00:59:45,050
facebook page or leave a review on

1403
00:59:48,610 --> 00:59:45,940
itunes

1404
00:59:52,000 --> 00:59:48,620
you can also support the skeptic zone

1405
00:59:54,720 --> 00:59:52,010
via patreon or paypal the skeptic zone

1406
00:59:57,100 --> 00:59:54,730
podcast is an independent production

1407
00:59:59,230 --> 00:59:57,110
reviews and opinions expressed on the

1408
01:00:01,570 --> 00:59:59,240
skeptic zone are not necessarily those

1409
01:00:03,360 --> 01:00:01,580
of Australian skeptics or any other

1410
01:00:13,510 --> 01:00:03,370
skeptical organization

1411
01:00:17,240 --> 01:00:15,950
hello you people who listen after the

1412
01:00:20,110 --> 01:00:17,250
music we'll have to give you a special

1413
01:00:27,560 --> 01:00:20,120

name I think all right here we go again

1414

01:00:30,470 --> 01:00:27,570

predicted number from 1 to 1000 and use

1415

01:00:32,180 --> 01:00:30,480

your psychic powers skeptics and

1416

01:00:32,570 --> 01:00:32,190

listeners having psychic paths ok here

1417

01:00:35,000 --> 01:00:32,580

we go

1418

01:00:38,660 --> 01:00:35,010

have you predicted your number from 1 to

1419

01:00:52,520 --> 01:00:38,670

1000 the number is gonna rattle my 10

1420

01:00:56,480 --> 01:00:52,530

sided die here 308 308 all those people

1421

01:00:57,740 --> 01:00:56,490

who predicted 308 well done why don't