

1
00:00:00,000 --> 00:00:09,089
[Music]

2
00:00:05,929 --> 00:00:11,849
welcome to the skeptic zone the podcast

3
00:00:09,089 --> 00:00:13,899
from Australia for science and reason

4
00:00:11,849 --> 00:00:16,890
[Music]

5
00:00:13,900 --> 00:00:22,839
[Applause]

6
00:00:16,890 --> 00:00:25,310
[Music]

7
00:00:22,839 --> 00:00:29,118
yes it's the skeptic zone podcast

8
00:00:25,309 --> 00:00:33,349
episode number 513 for the 19th of

9
00:00:29,118 --> 00:00:34,969
August 2018 it's not the numerology

10
00:00:33,350 --> 00:00:36,800
podcast although with all those numbers

11
00:00:34,969 --> 00:00:39,229
richardsaunders here with you from

12
00:00:36,799 --> 00:00:41,589
Sydney Australia coming off the back of

13
00:00:39,229 --> 00:00:45,169
two weeks of wonderful science at

14
00:00:41,590 --> 00:00:47,629
science Week which really lasted for two

15
00:00:45,170 --> 00:00:50,530
weeks so on this week's episode of the

16
00:00:47,628 --> 00:00:52,789
skeptics only Lots from science week

17
00:00:50,530 --> 00:00:55,250
however we're gonna kick off with an

18
00:00:52,789 --> 00:00:57,979
interview with Kate brown now Kate Brown

19
00:00:55,250 --> 00:01:01,009
known to many Australians as the guilty

20
00:00:57,979 --> 00:01:02,869
mum from ABC's checkout program he is

21
00:01:01,009 --> 00:01:05,599
also going to be the emcee for this

22
00:01:02,869 --> 00:01:07,609
year's skeptic on in October here in

23
00:01:05,599 --> 00:01:09,879
Sydney in Chatswood I caught up with

24
00:01:07,609 --> 00:01:12,500
Kate Brown a couple of days ago and she

25
00:01:09,879 --> 00:01:15,469
tells us all about her other work at

26
00:01:12,500 --> 00:01:18,640
choice magazine and also about her time

27
00:01:15,469 --> 00:01:22,280
at the checkout Consumer Affairs and

28
00:01:18,640 --> 00:01:25,218
skepticism following that it's part two

29

00:01:22,280 --> 00:01:27,829
of Maynard's spooky action at the

30
00:01:25,218 --> 00:01:29,839
Australian Museum where maenad was

31
00:01:27,828 --> 00:01:32,179
running around meeting and interviewing

32
00:01:29,840 --> 00:01:35,868
all sorts of scientists and interesting

33
00:01:32,180 --> 00:01:39,770
people this week dr. Carol chrysalis key

34
00:01:35,868 --> 00:01:42,049
part - good sir there's never enough

35
00:01:39,769 --> 00:01:43,938
time with dr. Karl cross on whiskey part

36
00:01:42,049 --> 00:01:46,130
2 of maynard's interview of dr. Karl

37
00:01:43,938 --> 00:01:48,949
followed by an interview with Katherine

38
00:01:46,129 --> 00:01:52,158
poults who was the program producer for

39
00:01:48,950 --> 00:01:54,439
the Sydney Science Festival and next

40
00:01:52,159 --> 00:01:56,439
week even more interviews from the

41
00:01:54,438 --> 00:01:59,209
launch of Science Week with Maynard

42
00:01:56,438 --> 00:02:01,368
following that I chat to Alethea Dean

43
00:01:59,209 --> 00:02:02,959

from the Australian skeptics who's going

44

00:02:01,368 --> 00:02:05,810
to be filling us in on more details

45

00:02:02,959 --> 00:02:08,780
about the upcoming skeptic on in October

46

00:02:05,810 --> 00:02:11,210
we have news of the possibility of a

47

00:02:08,780 --> 00:02:14,360
crash and a sign language interpreter

48

00:02:11,210 --> 00:02:18,650
and this is where we might be asking for

49

00:02:14,360 --> 00:02:20,930
your feedback and input then I head to

50

00:02:18,650 --> 00:02:22,879
the powerhouse museum or it's also known

51

00:02:20,930 --> 00:02:26,120
as the Museum of applied Arts and

52

00:02:22,879 --> 00:02:29,240
Sciences here in Sydney to speed meet

53

00:02:26,120 --> 00:02:31,039
the scientists I found myself in a room

54

00:02:29,240 --> 00:02:34,490
full of scientists all sitting at their

55

00:02:31,039 --> 00:02:36,780
desks just waiting just waiting to

56

00:02:34,490 --> 00:02:40,620
interviewed or to chat to the general

57

00:02:36,780 --> 00:02:43,340
public so I chat to marine biologists

58
00:02:40,620 --> 00:02:45,840
and people involved with bees and

59
00:02:43,340 --> 00:02:48,240
ecologists and all sorts of people this

60
00:02:45,840 --> 00:02:50,729
week and this is the first part of a

61
00:02:48,240 --> 00:02:53,460
series of these interviews next week

62
00:02:50,729 --> 00:02:55,530
part 2 and the week after part 3 there

63
00:02:53,460 --> 00:02:58,140
were just so many scientists to meet

64
00:02:55,530 --> 00:02:59,699
then to wrap up the show a really

65
00:02:58,139 --> 00:03:03,269
interesting interview with our reporter

66
00:02:59,699 --> 00:03:22,259
Kevin Davies based in Canberra now have

67
00:03:03,270 --> 00:03:25,620
a listen to this now some of you out

68
00:03:22,259 --> 00:03:27,959
there probably knew what that said that

69
00:03:25,620 --> 00:03:29,250
little bit of Morse code well we're

70
00:03:27,960 --> 00:03:31,110
going to be finding out about a

71
00:03:29,250 --> 00:03:33,449
wonderful lady called will

72
00:03:31,110 --> 00:03:35,520
affectionately known as mrs. Mac who

73
00:03:33,449 --> 00:03:37,589
taught thousands of people Morse code

74
00:03:35,520 --> 00:03:43,189
now before I listen to this interview

75
00:03:37,590 --> 00:03:45,930
myself I knew SOS in Morse code due to

76
00:03:43,189 --> 00:03:47,939
which a lot of people do it's quite

77
00:03:45,930 --> 00:03:51,239
famous but after listening to this

78
00:03:47,939 --> 00:03:52,770
interview I now know a couple more

79
00:03:51,239 --> 00:03:55,920
letters in Morse code and I won't forget

80
00:03:52,770 --> 00:03:58,620
them it's really interesting maybe I

81
00:03:55,919 --> 00:04:00,208
should learn the whole alphabet but now

82
00:03:58,620 --> 00:04:04,080
it's time for me to run downstairs and

83
00:04:00,209 --> 00:04:07,379
have some caramel pudding thanks Trish

84
00:04:04,080 --> 00:04:09,180
mmm my good friend Trish Han who appears

85
00:04:07,379 --> 00:04:12,719
on the sceptic zone from time to time is

86

00:04:09,180 --> 00:04:15,300
also my secret supplier of caramel

87
00:04:12,719 --> 00:04:17,459
pudding yes I'm gonna run downstairs

88
00:04:15,300 --> 00:04:19,790
grab some of that quickly come back and

89
00:04:17,459 --> 00:04:43,319
bring you the skeptic zone

90
00:04:19,790 --> 00:04:46,570
[Music]

91
00:04:43,319 --> 00:04:49,180
I'm with Kate Brown and Kate you're

92
00:04:46,569 --> 00:04:51,639
going to be the MC for skeptic on it's

93
00:04:49,180 --> 00:04:54,269
true I can't believe I'm being allowed

94
00:04:51,639 --> 00:04:57,039
let loose on the microphone for two days

95
00:04:54,269 --> 00:04:58,899
we're really looking forward to it now

96
00:04:57,040 --> 00:05:00,610
for those people out there especially in

97
00:04:58,899 --> 00:05:02,469
Australia and they're thinking okay

98
00:05:00,610 --> 00:05:04,389
Brown where do I know that name from

99
00:05:02,470 --> 00:05:06,790
where might people have seen you before

100
00:05:04,389 --> 00:05:08,829

popped up in a few places I'm well known

101

00:05:06,790 --> 00:05:10,120

for being a consumer journalist I work

102

00:05:08,829 --> 00:05:12,550

at choice

103

00:05:10,120 --> 00:05:15,189

I was also the artist formerly known as

104

00:05:12,550 --> 00:05:17,889

the guilty mum on the sadly now defunct

105

00:05:15,189 --> 00:05:20,680

TV show the check out sorry it's not to

106

00:05:17,889 --> 00:05:23,500

punch it's on hiatus according to the

107

00:05:20,680 --> 00:05:26,110

ABC oh yeah I was gonna ask you about

108

00:05:23,500 --> 00:05:27,430

that well let's look at choice first how

109

00:05:26,110 --> 00:05:29,610

long have you been with choice magazine

110

00:05:27,430 --> 00:05:34,240

I've worked a choice for over ten years

111

00:05:29,610 --> 00:05:37,270

I'm an editor there now I fully immersed

112

00:05:34,240 --> 00:05:39,280

in the consumer world but with a big

113

00:05:37,269 --> 00:05:42,250

dash of science obviously we love to

114

00:05:39,279 --> 00:05:44,889

test things at choice we love to get the

115
00:05:42,250 --> 00:05:46,569
real facts on things that some of the

116
00:05:44,889 --> 00:05:50,129
area's I look at are things like food

117
00:05:46,569 --> 00:05:53,529
the wellness industry the diet industry

118
00:05:50,129 --> 00:05:55,959
product safety and just about anything

119
00:05:53,529 --> 00:05:57,939
else you can think of I like I like the

120
00:05:55,959 --> 00:06:00,039
fact you said that wellness industry and

121
00:05:57,939 --> 00:06:03,459
it is an industry isn't it the wellness

122
00:06:00,040 --> 00:06:05,500
industry is huge and even with choice

123
00:06:03,459 --> 00:06:07,509
Raiders I'm surprised often if we

124
00:06:05,500 --> 00:06:09,699
present the facts on a particular

125
00:06:07,509 --> 00:06:11,620
product that's having its moment in the

126
00:06:09,699 --> 00:06:13,180
Sun we do get a lot of kickback from

127
00:06:11,620 --> 00:06:15,430
people even if we provide all the

128
00:06:13,180 --> 00:06:18,310
evidence or the lack of evidence more

129
00:06:15,430 --> 00:06:20,650
more commonly and it is interesting how

130
00:06:18,310 --> 00:06:23,379
much people do latch onto things around

131
00:06:20,649 --> 00:06:25,750
wellness these days and really really

132
00:06:23,379 --> 00:06:29,529
emotionally defend them and when you say

133
00:06:25,750 --> 00:06:32,410
kickback of course you mean flack I do I

134
00:06:29,529 --> 00:06:34,839
don't mean I'm funded by the ante bonus

135
00:06:32,410 --> 00:06:37,420
industry someone did actually accuse me

136
00:06:34,839 --> 00:06:41,189
once of being funded by what was it it

137
00:06:37,420 --> 00:06:45,520
made me laugh the the plant oil industry

138
00:06:41,189 --> 00:06:47,230
hmm the plant oil industry I had written

139
00:06:45,519 --> 00:06:49,339
an article about coconut oil which is

140
00:06:47,230 --> 00:06:53,030
apparently can cure anything

141
00:06:49,339 --> 00:06:55,189
you know yes and this and I suggested

142
00:06:53,029 --> 00:06:57,888
that things like olive oil or other oils

143

00:06:55,189 --> 00:06:59,930
were just as good if not better and a

144
00:06:57,889 --> 00:07:02,269
gentleman did write in and suggest that

145
00:06:59,930 --> 00:07:04,728
I was funded I don't know if there is

146
00:07:02,269 --> 00:07:06,649
such an industry but if there is sadly

147
00:07:04,728 --> 00:07:09,409
that they're not putting any money in my

148
00:07:06,649 --> 00:07:11,750
pocket we're all funded by some

149
00:07:09,410 --> 00:07:14,389
nefarious big corporation didn't you

150
00:07:11,750 --> 00:07:17,209
know that well I didn't your check come

151
00:07:14,389 --> 00:07:19,460
yet I'm still waiting for my check but

152
00:07:17,209 --> 00:07:20,989
Joyce magazine folks we've had a long

153
00:07:19,459 --> 00:07:22,489
and happy relationship at the sceptics

154
00:07:20,990 --> 00:07:24,650
of choice magazine we've gone in there

155
00:07:22,490 --> 00:07:26,810
often to have a chat about this product

156
00:07:24,649 --> 00:07:29,810
or that product or or more recently I

157
00:07:26,810 --> 00:07:31,100

think we did strange devices but this is

158

00:07:29,810 --> 00:07:32,689

exactly the sort of thing choice

159

00:07:31,100 --> 00:07:35,689

magazine have been looking at for years

160

00:07:32,689 --> 00:07:37,939

it is and the area that I look after we

161

00:07:35,689 --> 00:07:41,750

do look at health so we do see a lot of

162

00:07:37,939 --> 00:07:43,759

interesting health products sadly many

163

00:07:41,750 --> 00:07:44,959

of them appear in pharmacies and of

164

00:07:43,759 --> 00:07:47,478

course the most consumers look

165

00:07:44,959 --> 00:07:49,370

completely legitimate and even before I

166

00:07:47,478 --> 00:07:51,889

worked at choice I assumed anything in a

167

00:07:49,370 --> 00:07:55,850

pharmacy was legitimate we've looked at

168

00:07:51,889 --> 00:07:58,069

things like magnet cures for back pain

169

00:07:55,850 --> 00:08:00,410

and muscular pain

170

00:07:58,069 --> 00:08:03,199

the fabulous pain eraser which we looked

171

00:08:00,410 --> 00:08:05,360

at last year at choice which is like

172
00:08:03,199 --> 00:08:07,310
kind of using one of those things you

173
00:08:05,360 --> 00:08:09,620
like your barbecue and putting it

174
00:08:07,310 --> 00:08:11,389
against your skin doesn't do much but

175
00:08:09,620 --> 00:08:14,990
the pain arises you know well over 50

176
00:08:11,389 --> 00:08:16,490
bucks so an interesting choice for pain

177
00:08:14,990 --> 00:08:18,348
relief but yeah look these things are

178
00:08:16,490 --> 00:08:22,250
constantly growing another hedge and

179
00:08:18,348 --> 00:08:25,550
keep us pretty busy yeah yeah and I

180
00:08:22,250 --> 00:08:28,399
think that did that winner chunky award

181
00:08:25,550 --> 00:08:30,079
last year from remembering Crickett yeah

182
00:08:28,399 --> 00:08:32,778
and and just for those listeners

183
00:08:30,079 --> 00:08:34,189
overseas the shock ease it's like the

184
00:08:32,778 --> 00:08:35,689
bent spoon award the Australians get

185
00:08:34,190 --> 00:08:38,089
because it's it's the ward you don't

186
00:08:35,690 --> 00:08:40,490
want to get from choice magazines true

187
00:08:38,089 --> 00:08:44,779
the the winners never show up certainly

188
00:08:40,490 --> 00:08:48,610
Richard not once and many of the winners

189
00:08:44,778 --> 00:08:52,429
have included large banking corporations

190
00:08:48,610 --> 00:08:54,500
other corporates large food

191
00:08:52,429 --> 00:08:57,500
manufacturers they never turn up it's

192
00:08:54,500 --> 00:08:59,419
very sad it's very sad now this does tie

193
00:08:57,500 --> 00:09:01,168
in with the work in the checkout of

194
00:08:59,419 --> 00:09:03,818
course and I remember

195
00:09:01,168 --> 00:09:05,078
when the checkout started just before it

196
00:09:03,818 --> 00:09:07,808
started I went to there we see and I

197
00:09:05,078 --> 00:09:09,818
interviewed chairs I think and he was

198
00:09:07,808 --> 00:09:12,188
still one of the producers yeah yeah

199
00:09:09,818 --> 00:09:14,828
Chaz did a lot of script editing behind

200

00:09:12,188 --> 00:09:17,048
the scenes work you can play spot the

201
00:09:14,828 --> 00:09:19,508
chairs too he often pops up in some of

202
00:09:17,048 --> 00:09:22,418
the segments I must have a look at some

203
00:09:19,509 --> 00:09:24,369
of the there I would say repeat so the

204
00:09:22,418 --> 00:09:26,708
good thing is and what I really love

205
00:09:24,369 --> 00:09:28,989
many things about the check out

206
00:09:26,708 --> 00:09:32,438
it's a favorite show of the skeptics of

207
00:09:28,989 --> 00:09:34,479
course but so much of it is simply

208
00:09:32,438 --> 00:09:35,498
freely available on YouTube and I think

209
00:09:34,479 --> 00:09:37,299
that it's a wonderful idea

210
00:09:35,499 --> 00:09:39,220
yeah look I think with the show it was a

211
00:09:37,298 --> 00:09:41,588
great approach they released every

212
00:09:39,220 --> 00:09:43,479
episode on YouTube they also put each

213
00:09:41,589 --> 00:09:44,109
segment on YouTube which i think is

214
00:09:43,479 --> 00:09:45,939

really clever

215

00:09:44,109 --> 00:09:48,489

there's nothing more annoying than

216

00:09:45,938 --> 00:09:50,108

having to scroll through 30 minutes of a

217

00:09:48,489 --> 00:09:52,079

show trying to find that segment that

218

00:09:50,109 --> 00:09:55,019

you like that pertain to your interests

219

00:09:52,078 --> 00:09:57,878

and I thought that was a great way of

220

00:09:55,019 --> 00:10:00,249

making that information accessible but

221

00:09:57,879 --> 00:10:01,418

really shareable so even even the

222

00:10:00,249 --> 00:10:04,178

dreaded guilty mum has her own channel

223

00:10:01,418 --> 00:10:09,038

with every single episode separately

224

00:10:04,178 --> 00:10:11,889

listed and I think that's what has given

225

00:10:09,038 --> 00:10:14,288

the show so much Skype in terms of

226

00:10:11,889 --> 00:10:16,298

viewers when the show was put on hiatus

227

00:10:14,288 --> 00:10:18,369

recently it was interesting to see that

228

00:10:16,298 --> 00:10:20,438

quite a few people from overseas had

229

00:10:18,369 --> 00:10:21,788
been watching it in the States and in

230

00:10:20,438 --> 00:10:23,558
Canada and even though they were saying

231

00:10:21,788 --> 00:10:24,788
look how laws are different we're you

232

00:10:23,558 --> 00:10:26,019
know I could take a lot of the

233

00:10:24,788 --> 00:10:28,149
principles because a lot of them are

234

00:10:26,019 --> 00:10:30,220
just common sense and apply them to our

235

00:10:28,149 --> 00:10:32,078
own situations so I think you know it's

236

00:10:30,220 --> 00:10:34,329
a it was a really fantastic public

237

00:10:32,078 --> 00:10:36,368
service it's a great way to give people

238

00:10:34,328 --> 00:10:38,858
information that's memorable by telling

239

00:10:36,369 --> 00:10:41,619
a story making a joke

240

00:10:38,859 --> 00:10:43,418
and it really resonated with with

241

00:10:41,619 --> 00:10:45,699
younger people as well and so I think

242

00:10:43,418 --> 00:10:48,188
you know as sad as it is that it's on

243
00:10:45,698 --> 00:10:49,628
hiatus or possibly acts you know that

244
00:10:48,188 --> 00:10:51,578
that great information lives on on

245
00:10:49,629 --> 00:10:53,259
YouTube it certainly does now folks in

246
00:10:51,578 --> 00:10:56,828
this week's show notes I shall link

247
00:10:53,259 --> 00:10:58,479
directly to the guilty mum Channel is it

248
00:10:56,828 --> 00:11:01,028
called the guilty mum or as a guilty mum

249
00:10:58,479 --> 00:11:03,009
or Kelsi mom has a guilty mum Oh even

250
00:11:01,028 --> 00:11:05,570
when you say it now I'm

251
00:11:03,009 --> 00:11:09,230
definitely not one in my own life but

252
00:11:05,570 --> 00:11:11,540
I'm more of a slack mom that yes as a

253
00:11:09,230 --> 00:11:13,519
guilty mum she does have her own channel

254
00:11:11,539 --> 00:11:15,829
and there's some other great consumer

255
00:11:13,519 --> 00:11:18,289
info on there they've done some great

256
00:11:15,830 --> 00:11:21,379
work on pharmacy some of those great

257

00:11:18,289 --> 00:11:22,849
pharmacy products in fact that you will

258
00:11:21,379 --> 00:11:24,799
see chosen that there was a great one

259
00:11:22,850 --> 00:11:28,700
about cold and flu medication shows how

260
00:11:24,799 --> 00:11:32,120
to cameo at dresses a giant nose very

261
00:11:28,700 --> 00:11:34,670
cranky nose they'll watch that one

262
00:11:32,120 --> 00:11:36,860
but yeah hop on and have a look

263
00:11:34,669 --> 00:11:38,269
certainly why again folks Lincoln this

264
00:11:36,860 --> 00:11:39,560
week's show notes and I'll tell you a

265
00:11:38,269 --> 00:11:42,289
very good friend of ours in the

266
00:11:39,559 --> 00:11:44,359
skeptical world Michael Marshall who is

267
00:11:42,289 --> 00:11:46,309
in the good thinking society in the UK I

268
00:11:44,360 --> 00:11:48,200
would sometimes send him a link to

269
00:11:46,309 --> 00:11:49,789
something from the checkout and he'd

270
00:11:48,200 --> 00:11:51,530
write back hours and hours later said

271
00:11:49,789 --> 00:11:54,860

I've just spent the last six hours

272

00:11:51,529 --> 00:11:56,569

watching the checkout quite addictive so

273

00:11:54,860 --> 00:11:59,269

congratulations by the way and all that

274

00:11:56,570 --> 00:12:02,060

work yeah and I think you came across as

275

00:11:59,269 --> 00:12:03,799

your character very well it was you did

276

00:12:02,059 --> 00:12:06,049

it with such style and the hint of

277

00:12:03,799 --> 00:12:06,799

cheekiness and humor and I thought it

278

00:12:06,049 --> 00:12:09,589

was very enjoyable

279

00:12:06,799 --> 00:12:11,299

thank you it was brave Julian and Craig

280

00:12:09,590 --> 00:12:14,480

to give me a guy I'd never been let

281

00:12:11,299 --> 00:12:16,099

loose on a camera before so maybe it was

282

00:12:14,480 --> 00:12:17,899

good therapy after being a parent myself

283

00:12:16,100 --> 00:12:20,149

but yeah it was it was a great show to

284

00:12:17,899 --> 00:12:22,309

work on and and and for me like a great

285

00:12:20,149 --> 00:12:24,889

way to say that consumer faith doesn't

286
00:12:22,309 --> 00:12:27,199
have to be boring and fact you know

287
00:12:24,889 --> 00:12:28,879
evidence-based stuff doesn't have to be

288
00:12:27,200 --> 00:12:31,310
boring you can you know it's how you

289
00:12:28,879 --> 00:12:32,720
tell the story so we are very excited

290
00:12:31,309 --> 00:12:34,489
and very much looking forward to the

291
00:12:32,720 --> 00:12:38,690
fact that you're M seeing our skeptic on

292
00:12:34,490 --> 00:12:40,310
in October how do you feeling about that

293
00:12:38,690 --> 00:12:42,560
you've sort of taking a big breath or

294
00:12:40,309 --> 00:12:44,209
what do you expect oh look you know I

295
00:12:42,559 --> 00:12:46,279
know Laurens long did it last year and

296
00:12:44,210 --> 00:12:50,030
he's very good with a Rubik's Cube I

297
00:12:46,279 --> 00:12:52,189
don't think I have any talents to rival

298
00:12:50,029 --> 00:12:55,009
that I do have a very loud voice and I

299
00:12:52,190 --> 00:12:57,560
am quite bossy being a parent so I you

300
00:12:55,009 --> 00:12:59,870
know I'll be keeping people in line I'm

301
00:12:57,559 --> 00:13:01,489
really excited to UM I'm also really

302
00:12:59,870 --> 00:13:02,629
excited to be privy to the whole two

303
00:13:01,490 --> 00:13:05,299
dates because you've got an amazing

304
00:13:02,629 --> 00:13:07,159
line-up and I'm really looking forward

305
00:13:05,299 --> 00:13:09,069
to it I loved it last year and I think

306
00:13:07,159 --> 00:13:10,969
this year looks even even better again

307
00:13:09,070 --> 00:13:13,520
absolutely well thank you very much for

308
00:13:10,970 --> 00:13:14,910
your time folks yet another reason my

309
00:13:13,519 --> 00:13:16,439
goodness me to come

310
00:13:14,909 --> 00:13:18,600
- you're saying skeptics National

311
00:13:16,440 --> 00:13:20,910
Convention skeptic on and you can meet

312
00:13:18,600 --> 00:13:23,360
their guilty mum in person okay thank

313
00:13:20,909 --> 00:13:35,449
you very much thank you ceasing

314

00:13:23,360 --> 00:13:38,100
[Music]

315
00:13:35,450 --> 00:13:40,920
Blackwatch your guide to quackery Pell

316
00:13:38,100 --> 00:13:41,940
fraud and intelligent decisions operated

317
00:13:40,919 --> 00:13:44,669
by Stephan Barratt

318
00:13:41,940 --> 00:13:46,980
MD quite watch is now an international

319
00:13:44,669 --> 00:13:49,229
network of people who concerned about

320
00:13:46,980 --> 00:13:51,750
health related frauds myths fans

321
00:13:49,230 --> 00:13:54,600
fallacies and misconduct its primary

322
00:13:51,750 --> 00:13:57,059
focus is on quackery related information

323
00:13:54,600 --> 00:13:59,879
that is difficult or impossible to get

324
00:13:57,059 --> 00:14:03,269
elsewhere articles on quackery include

325
00:13:59,879 --> 00:14:06,889
quackery how should it be defined how it

326
00:14:03,269 --> 00:14:10,079
sells 26 ways to spot it how it comes

327
00:14:06,889 --> 00:14:12,569
cancer patients 7 warning signs for

328
00:14:10,080 --> 00:14:15,560

bogus science why health professionals

329

00:14:12,570 --> 00:14:17,640

become quacks and many more including

330

00:14:15,559 --> 00:14:21,209

in-depth looks at an acupuncture

331

00:14:17,639 --> 00:14:26,639

chiropractic homeopathy naturopathy and

332

00:14:21,210 --> 00:14:31,908

much more visit www.gfi.com/webmonitor

333

00:14:26,639 --> 00:14:31,908

[Music]

334

00:14:36,509 --> 00:14:46,269

here's main our spooky action at the

335

00:14:41,710 --> 00:14:47,950

distance now I just love hearing about

336

00:14:46,269 --> 00:14:51,519

your travels you're going to be at the

337

00:14:47,950 --> 00:14:53,320

the skeptics convention yes getting you

338

00:14:51,519 --> 00:14:55,360

a happily first cab off the rank I think

339

00:14:53,320 --> 00:14:57,129

with a brand new show and look Carl

340

00:14:55,360 --> 00:14:58,810

since I've met you many many years ago

341

00:14:57,129 --> 00:15:00,309

the world has changed a lot in the place

342

00:14:58,809 --> 00:15:02,169

of science is certainly very different

343
00:15:00,309 --> 00:15:03,789
and the way science is regarded seems to

344
00:15:02,169 --> 00:15:06,669
be in under threat at the moment do you

345
00:15:03,789 --> 00:15:08,230
feel that or not there's the rise of

346
00:15:06,669 --> 00:15:11,439
fake news but there's always been fake

347
00:15:08,230 --> 00:15:15,009
news going all the way back to the Great

348
00:15:11,440 --> 00:15:16,000
Fire of London and even earlier with the

349
00:15:15,009 --> 00:15:18,460
Great Fire of Rome

350
00:15:16,000 --> 00:15:20,259
so because I always try and blame a

351
00:15:18,460 --> 00:15:21,639
group of people that they don't like us

352
00:15:20,259 --> 00:15:26,080
starting it that's always one they

353
00:15:21,639 --> 00:15:28,750
always bring up so science has a

354
00:15:26,080 --> 00:15:30,970
disadvantage which is that it in some

355
00:15:28,750 --> 00:15:32,409
cases can be absolutely true and some

356
00:15:30,970 --> 00:15:34,690
people don't like this for various

357
00:15:32,409 --> 00:15:37,480
reasons so it was a guard to global

358
00:15:34,690 --> 00:15:40,960
warming what we have is a situation that

359
00:15:37,480 --> 00:15:44,139
out of a world gross domestic product of

360
00:15:40,960 --> 00:15:47,019
about 90 or so billion dollars the

361
00:15:44,139 --> 00:15:49,149
fossil fuel companies gets subsidies of

362
00:15:47,019 --> 00:15:53,679
about five and a bit trillion dollars a

363
00:15:49,149 --> 00:15:56,049
year or six point two five percent of

364
00:15:53,679 --> 00:15:59,789
the world's gross domestic product so

365
00:15:56,049 --> 00:16:02,019
every single dollar that is earned the

366
00:15:59,789 --> 00:16:04,599
your fossil fuel companies on average

367
00:16:02,019 --> 00:16:07,269
around the world get six and a half six

368
00:16:04,600 --> 00:16:08,710
and a quarter cents question when was

369
00:16:07,269 --> 00:16:11,139
the last time you saw a fossil fuel

370
00:16:08,710 --> 00:16:12,519
company being broke and trying to have a

371

00:16:11,139 --> 00:16:14,620
lemon gun sale at the local primary

372
00:16:12,519 --> 00:16:17,769
school on a Sunday morning to raise some

373
00:16:14,620 --> 00:16:20,320
money so the question is why do the

374
00:16:17,769 --> 00:16:22,659
fossil fuel companies get so much money

375
00:16:20,320 --> 00:16:25,180
on top of the profits while they're

376
00:16:22,659 --> 00:16:26,949
destroying our environment it seems that

377
00:16:25,179 --> 00:16:29,349
they must have friends in high places in

378
00:16:26,950 --> 00:16:30,730
Australia the latest data we have goes

379
00:16:29,350 --> 00:16:33,220
back in 2015

380
00:16:30,730 --> 00:16:36,279
and the amount of money paid as

381
00:16:33,220 --> 00:16:39,190
subsidies free money to the fossil fuel

382
00:16:36,279 --> 00:16:41,429
companies is 2% of our GDP it's more

383
00:16:39,190 --> 00:16:44,500
than the military yet it works out to in

384
00:16:41,429 --> 00:16:47,919
2015 dollars one thousand two hundred

385
00:16:44,500 --> 00:16:51,789

and sixty dollars that every Australian

386

00:16:47,919 --> 00:16:54,370

citizen baby to grandparent pays to the

387

00:16:51,789 --> 00:16:56,019

fossil fuel companies on top of their

388

00:16:54,370 --> 00:16:57,460

massive profits and the fact that

389

00:16:56,019 --> 00:16:59,860

they're destroying the environment

390

00:16:57,460 --> 00:17:01,210

because they can just buy what they want

391

00:16:59,860 --> 00:17:03,250

really that Deb that bought the

392

00:17:01,210 --> 00:17:04,539

politicians well the answer to that is

393

00:17:03,250 --> 00:17:07,059

that you should become a politician I

394

00:17:04,539 --> 00:17:09,129

actually found on my visit to China the

395

00:17:07,059 --> 00:17:12,849

original poster where Mao tse-tung's

396

00:17:09,130 --> 00:17:15,370

said political power grows out of the

397

00:17:12,849 --> 00:17:16,088

barrel of a gun I've got their poster

398

00:17:15,369 --> 00:17:17,679

Wow

399

00:17:16,088 --> 00:17:22,059

right it's a propaganda poster in

400
00:17:17,680 --> 00:17:24,610
Shanghai so in Australia and most of the

401
00:17:22,059 --> 00:17:28,990
Western world political power grows out

402
00:17:24,609 --> 00:17:31,750
of the politics out of the Parliament so

403
00:17:28,990 --> 00:17:34,059
everybody like I did run for politics

404
00:17:31,750 --> 00:17:35,829
and won it or if you can't support

405
00:17:34,059 --> 00:17:38,859
somebody who will because you can have

406
00:17:35,829 --> 00:17:41,259
influence but you don't have power until

407
00:17:38,859 --> 00:17:43,029
you can write a law so everybody get

408
00:17:41,259 --> 00:17:44,529
into politics and that way the world

409
00:17:43,029 --> 00:17:46,389
will be a better place it's a hard run

410
00:17:44,529 --> 00:17:48,399
and yeah and one of the things that they

411
00:17:46,390 --> 00:17:50,080
they do you remember several years ago

412
00:17:48,400 --> 00:17:52,330
many years ago John Howard spent a lot

413
00:17:50,079 --> 00:17:54,099
of time walking around the pros in Prime

414
00:17:52,329 --> 00:17:57,789
Minister of Australia in various pests

415
00:17:54,099 --> 00:17:59,709
for coal colored jumpsuits on look

416
00:17:57,789 --> 00:18:02,470
hey what else he did that year alright

417
00:17:59,710 --> 00:18:04,990
now what he did was he spent two thirds

418
00:18:02,470 --> 00:18:06,339
of Australia's GDP on submarines that

419
00:18:04,990 --> 00:18:07,809
could not work the columns class

420
00:18:06,339 --> 00:18:09,459
submarines and because they're going to

421
00:18:07,809 --> 00:18:11,079
make local jobs in Adelaide looks like

422
00:18:09,460 --> 00:18:12,910
that wasn't it yeah and making him a

423
00:18:11,079 --> 00:18:16,149
world-class submarine is not a trivial

424
00:18:12,910 --> 00:18:18,970
task and we failed and as a result the

425
00:18:16,150 --> 00:18:20,320
way that he used to convince people not

426
00:18:18,970 --> 00:18:22,120
again to politics we've got wearing

427
00:18:20,319 --> 00:18:24,700
personal jumpsuits the best thing the

428

00:18:22,119 --> 00:18:26,799
politicians have done to us is so that

429
00:18:24,700 --> 00:18:28,569
when I say hey Minard why don't you run

430
00:18:26,799 --> 00:18:30,039
for politics and automatically as a

431
00:18:28,569 --> 00:18:32,019
reflex without even thinking about it

432
00:18:30,039 --> 00:18:34,269
you saying oh god no they're all crooks

433
00:18:32,019 --> 00:18:37,089
and you're missing the point that if you

434
00:18:34,269 --> 00:18:39,369
go in there'll be an honest person who

435
00:18:37,089 --> 00:18:41,230
cares about our children and their

436
00:18:39,369 --> 00:18:43,569
children so this is my lesson for

437
00:18:41,230 --> 00:18:45,339
Australians run for politics or support

438
00:18:43,569 --> 00:18:47,289
people who do take your good people in

439
00:18:45,339 --> 00:18:48,339
there passing laws that we like see the

440
00:18:47,289 --> 00:18:49,450
thing that I would imagine be a

441
00:18:48,339 --> 00:18:51,369
challenge particularly for a rational

442
00:18:49,450 --> 00:18:53,049

person like yourself Carl is it is that

443

00:18:51,369 --> 00:18:54,639
politics is the art of compromise

444

00:18:53,049 --> 00:18:56,500
because you can't always get what you

445

00:18:54,640 --> 00:18:58,930
want you have to compromise and how do

446

00:18:56,500 --> 00:19:00,430
you compromise facts you can't and you

447

00:18:58,930 --> 00:19:03,009
say that's why you just go in there and

448

00:19:00,430 --> 00:19:04,480
be yourself and be honest and be

449

00:19:03,009 --> 00:19:06,339
yourself and just live whatever is on

450

00:19:04,480 --> 00:19:08,620
your mind float out Donald Trump let's

451

00:19:06,339 --> 00:19:10,809
everything I float out and that's been

452

00:19:08,619 --> 00:19:12,729
an interesting lesson it is it's almost

453

00:19:10,809 --> 00:19:14,200
like yeah yeah I don't like what he does

454

00:19:12,730 --> 00:19:16,360
but the fact that he's like he's

455

00:19:14,200 --> 00:19:18,190
actually he appears to be keeping

456

00:19:16,359 --> 00:19:19,419
promises from his election that you

457
00:19:18,190 --> 00:19:21,430
don't they they normally throw him away

458
00:19:19,420 --> 00:19:22,870
and it's like he's got a list he's going

459
00:19:21,430 --> 00:19:25,090
through like Gough Whitlam used to well

460
00:19:22,869 --> 00:19:27,609
whenever I see him on TV I get the

461
00:19:25,089 --> 00:19:30,490
mental impression that I'm watching a

462
00:19:27,609 --> 00:19:33,129
kid in year five at a primary school

463
00:19:30,490 --> 00:19:37,480
giving a report on a book that he hasn't

464
00:19:33,130 --> 00:19:38,620
read marvelous fantastic great a whole

465
00:19:37,480 --> 00:19:41,200
lot of really soft words nothing

466
00:19:38,619 --> 00:19:42,459
specific and dr. Kyle wake up and catch

467
00:19:41,200 --> 00:19:46,630
you online where we can see what you're

468
00:19:42,460 --> 00:19:49,539
up to and dr. Calvo Comdr kar Elcom will

469
00:19:46,630 --> 00:19:51,790
have all my shows and also are just a

470
00:19:49,539 --> 00:19:52,990
freebie I'm very happy to do free

471
00:19:51,789 --> 00:19:54,430
science QAS

472
00:19:52,990 --> 00:19:56,620
with schools anywhere in Australia

473
00:19:54,430 --> 00:19:58,779
around the world just go to dr. Kyle

474
00:19:56,619 --> 00:20:00,429
calm and see the bit that says teachers

475
00:19:58,779 --> 00:20:02,710
want a free sized Q&A session with your

476
00:20:00,430 --> 00:20:03,820
class cost you nothing and you'll fit

477
00:20:02,710 --> 00:20:04,500
into your schedule but you're travelling

478
00:20:03,819 --> 00:20:06,269
around anyway maybe

479
00:20:04,500 --> 00:20:07,500
you never know I use this wonderful

480
00:20:06,269 --> 00:20:09,900
invention called the interwebs

481
00:20:07,500 --> 00:20:11,400
wow that thing that thing yeah alright

482
00:20:09,900 --> 00:20:13,590
and that's what Scott's for I wondered

483
00:20:11,400 --> 00:20:14,610
yeah well I keep on coming across people

484
00:20:13,589 --> 00:20:18,629
who don't know the difference between

485

00:20:14,609 --> 00:20:21,179
these three things Wi-Fi the Internet

486
00:20:18,630 --> 00:20:22,800
and the world wide web it takes about 10

487
00:20:21,180 --> 00:20:25,110
mins to educate them and then they're

488
00:20:22,799 --> 00:20:26,970
very happy and go Cal great talking you

489
00:20:25,109 --> 00:20:28,519
again thank you dr. Maynard

490
00:20:26,970 --> 00:20:30,919
[Applause]

491
00:20:28,519 --> 00:20:32,538
I guess the music is pumping here and of

492
00:20:30,919 --> 00:20:33,980
course what would science be without the

493
00:20:32,538 --> 00:20:35,539
great

494
00:20:33,980 --> 00:20:38,809
[Applause]

495
00:20:35,539 --> 00:20:41,269
the great early work of some pioneers

496
00:20:38,809 --> 00:20:43,039
much of the evolutionary science that

497
00:20:41,269 --> 00:20:45,470
Darwin followed of course that was cool

498
00:20:43,039 --> 00:20:47,450
and the gang cool of course studied at

499
00:20:45,470 --> 00:20:49,339

the University of Edinburgh the gang

500

00:20:47,450 --> 00:20:51,110

studied at the University of Brooklyn

501

00:20:49,339 --> 00:20:54,740

they had tough times but look this is

502

00:20:51,109 --> 00:20:56,519

what they worked out oh yes you love

503

00:20:54,740 --> 00:20:58,890

science

504

00:20:56,519 --> 00:21:00,420

hang on I've never chance to drop my big

505

00:20:58,890 --> 00:21:01,050

word up I've got a big science word to

506

00:21:00,420 --> 00:21:03,090

drop on you

507

00:21:01,049 --> 00:21:05,970

if epigenetics what do you know about

508

00:21:03,089 --> 00:21:10,049

that car locks Wow okay is it a real

509

00:21:05,970 --> 00:21:15,120

thing in humans or not yes so the best

510

00:21:10,049 --> 00:21:16,529

example of every genetics is the Dutch

511

00:21:15,119 --> 00:21:21,029

hunger winter

512

00:21:16,529 --> 00:21:23,339

oh my guess so after the for the end of

513

00:21:21,029 --> 00:21:25,470

this fixing World War the Allies were

514
00:21:23,339 --> 00:21:27,839
pushing across towards Holland having

515
00:21:25,470 --> 00:21:30,089
successfully reinvade at Europe they

516
00:21:27,839 --> 00:21:31,529
were trying to get to a bridge at Arnhem

517
00:21:30,089 --> 00:21:35,849
as in Arnhem Land

518
00:21:31,529 --> 00:21:37,470
it's named after that and in preparation

519
00:21:35,849 --> 00:21:40,789
for their getting there the Dutch people

520
00:21:37,470 --> 00:21:43,440
rose up against their nasty oppressors

521
00:21:40,789 --> 00:21:45,869
however the Americans and the Allies

522
00:21:43,440 --> 00:21:48,750
couldn't get there in time the Dutch

523
00:21:45,869 --> 00:21:51,178
within prosper persecuted by their Nazi

524
00:21:48,750 --> 00:21:52,259
oppressors and then starved during Wars

525
00:21:51,179 --> 00:21:54,380
that turning out to be an especially

526
00:21:52,259 --> 00:21:56,779
nasty winter

527
00:21:54,380 --> 00:21:58,910
as you would expect many people died as

528
00:21:56,779 --> 00:22:02,119
you would expect pregnant women would

529
00:21:58,910 --> 00:22:04,610
give birth to smaller babies totally

530
00:22:02,119 --> 00:22:06,559
expected but tragic but expected what

531
00:22:04,609 --> 00:22:08,750
was the big surprise was that when those

532
00:22:06,559 --> 00:22:11,179
babies grew up they then gave birth to

533
00:22:08,750 --> 00:22:13,609
smaller babies who in turn gave birth of

534
00:22:11,180 --> 00:22:16,460
smaller babies so that's there be

535
00:22:13,609 --> 00:22:20,059
genetics epi means around genexus

536
00:22:16,460 --> 00:22:22,430
genetics so you don't change the DNA but

537
00:22:20,059 --> 00:22:24,679
you change you put a little markers on

538
00:22:22,430 --> 00:22:26,390
it around it so you don't read both bits

539
00:22:24,680 --> 00:22:29,360
of it this is how you've got a graph to

540
00:22:26,390 --> 00:22:30,890
plan for a building and you just leave

541
00:22:29,359 --> 00:22:35,329
out a floor or you leave out the doors

542

00:22:30,890 --> 00:22:38,600
so epigenetics is how there are changes

543
00:22:35,329 --> 00:22:41,480
that happen around the DNA even change

544
00:22:38,599 --> 00:22:43,129
how its expressed so for example it was

545
00:22:41,480 --> 00:22:44,630
just natural selection saying there's

546
00:22:43,130 --> 00:22:46,790
not a lot of food around so let's not

547
00:22:44,630 --> 00:22:50,450
have big babies for a while yeah so in

548
00:22:46,789 --> 00:22:53,210
bees all of these identical when they

549
00:22:50,450 --> 00:22:56,330
come out of the mother but depending on

550
00:22:53,210 --> 00:22:59,930
what they're fed half a dozen will turn

551
00:22:56,329 --> 00:23:02,269
into Queens that are fertile females and

552
00:22:59,930 --> 00:23:04,250
then the rest depending on their fate

553
00:23:02,269 --> 00:23:06,769
what they fed will mostly turn into

554
00:23:04,250 --> 00:23:12,740
sterile females and a very small number

555
00:23:06,769 --> 00:23:13,950
maybe a thousand will turn into foot all

556
00:23:12,740 --> 00:23:16,019

males

557

00:23:13,950 --> 00:23:17,460

and it's all due to every genetics yeah

558

00:23:16,019 --> 00:23:19,819

so it's a real thing Richard I wasn't

559

00:23:17,460 --> 00:23:19,819

happening up

560

00:23:21,960 --> 00:23:26,850

yes of course who can forget the early

561

00:23:24,659 --> 00:23:28,950

work and the later work of a doctor

562

00:23:26,849 --> 00:23:32,519

Deborah Harry of course who went to the

563

00:23:28,950 --> 00:23:36,778

University of Studio 56 what the

564

00:23:32,519 --> 00:23:38,490

University of pseudo 54 actually part of

565

00:23:36,778 --> 00:23:40,409

class early transplantation work

566

00:23:38,490 --> 00:23:43,649

unfortunately glass was not exactly a

567

00:23:40,409 --> 00:23:45,119

great idea for a transplant look we've

568

00:23:43,648 --> 00:23:46,798

tried to find a bit of a hushed area

569

00:23:45,118 --> 00:23:48,359

here just a very very crowded room of

570

00:23:46,798 --> 00:23:50,339

the Australian Museum but I'm here with

571
00:23:48,359 --> 00:23:51,178
the producer of science week is that

572
00:23:50,339 --> 00:23:54,028
your correct title

573
00:23:51,179 --> 00:23:56,009
I'm producer to Sydney science festival

574
00:23:54,028 --> 00:23:58,740
so at the Museum of Hyde Arts and

575
00:23:56,009 --> 00:24:01,079
Sciences wow that's wow now that's a lot

576
00:23:58,740 --> 00:24:03,298
of pressure how are you handling it it's

577
00:24:01,079 --> 00:24:05,819
great it's it's a busy time of year for

578
00:24:03,298 --> 00:24:08,339
us but also the most fun time of year

579
00:24:05,819 --> 00:24:10,558
everything is culminating in this week

580
00:24:08,339 --> 00:24:12,689
now what is different about this year's

581
00:24:10,558 --> 00:24:15,658
science festival to ones you've been a

582
00:24:12,690 --> 00:24:17,278
part of us or seen in the past yeah so

583
00:24:15,659 --> 00:24:19,350
it's at the fourth year of the festival

584
00:24:17,278 --> 00:24:22,109
it's actually the biggest festival yet

585
00:24:19,349 --> 00:24:23,849
so we have more partners and more events

586
00:24:22,109 --> 00:24:26,158
than we've ever had before so that's

587
00:24:23,849 --> 00:24:28,558
really exciting this year we've engaged

588
00:24:26,159 --> 00:24:30,509
with libraries throughout Sydney so we

589
00:24:28,558 --> 00:24:33,599
have a lot more community events all

590
00:24:30,509 --> 00:24:35,819
throughout the city and we're also we

591
00:24:33,599 --> 00:24:38,579
co-produced the festival with Australian

592
00:24:35,819 --> 00:24:39,428
Museum so that's been a big change tunes

593
00:24:38,579 --> 00:24:42,638
been

594
00:24:39,429 --> 00:24:44,139
amazing these your background in event

595
00:24:42,638 --> 00:24:46,079
organizational you've got a science

596
00:24:44,138 --> 00:24:49,898
background as well so actually my

597
00:24:46,079 --> 00:24:51,158
backgrounds in botany what's your

598
00:24:49,898 --> 00:24:52,918
favorite flower what's your favorite

599

00:24:51,159 --> 00:24:56,080
plant come on everyone's got their own

600
00:24:52,919 --> 00:24:59,109
so the Canadian banner say favorite

601
00:24:56,079 --> 00:25:03,308
plant is called hog peanut in the Fei

602
00:24:59,108 --> 00:25:05,798
BAC bean family wise I don't get asked

603
00:25:03,308 --> 00:25:07,388
that enough I know why that one doesn't

604
00:25:05,798 --> 00:25:11,229
look good does it do something special

605
00:25:07,388 --> 00:25:12,848
is it weird it just looks amazing if

606
00:25:11,229 --> 00:25:14,919
you're looking at plants a lot there's

607
00:25:12,848 --> 00:25:16,329
some that speak to you in different ways

608
00:25:14,919 --> 00:25:19,019
and there's some that just say be

609
00:25:16,329 --> 00:25:21,489
humorous or friendly and it just always

610
00:25:19,019 --> 00:25:24,278
smile and love it when I see it

611
00:25:21,489 --> 00:25:25,960
hey I have to ask you I think in the

612
00:25:24,278 --> 00:25:27,190
Canadian botany world do you have any

613
00:25:25,960 --> 00:25:28,690

carnivorous plants like the Venus

614

00:25:27,190 --> 00:25:30,308

flytrap or the Western Australian

615

00:25:28,690 --> 00:25:31,330

picture plant you have plants that need

616

00:25:30,308 --> 00:25:33,009

flies or stuff

617

00:25:31,329 --> 00:25:35,558

we sure do what do you what do you have

618

00:25:33,009 --> 00:25:39,659

we have 10 do say plants in the drosera

619

00:25:35,558 --> 00:25:39,658

family we have a lot of bogs in Canada

620

00:25:39,690 --> 00:25:46,359

very acidic environments not much

621

00:25:43,528 --> 00:25:48,038

drainage and the the Canadian Shield

622

00:25:46,358 --> 00:25:50,678

they never get to talk about this that's

623

00:25:48,038 --> 00:25:52,569

all said pitcher cleanser Saracen is

624

00:25:50,679 --> 00:25:54,129

there you can help me because they're

625

00:25:52,569 --> 00:25:55,898

very difficult to grow at home because

626

00:25:54,128 --> 00:25:57,848

you can't get that bog environment in

627

00:25:55,898 --> 00:26:00,158

your garden easily can you is it is

628
00:25:57,848 --> 00:26:02,378
impossible to do I've killed all of the

629
00:26:00,159 --> 00:26:03,669
ones I've tried that makes me feel

630
00:26:02,378 --> 00:26:05,259
better because you're a professional and

631
00:26:03,669 --> 00:26:07,719
you couldn't do it yeah because the soil

632
00:26:05,259 --> 00:26:12,230
is so difficult to match inside yeah

633
00:26:07,719 --> 00:26:14,450
yeah and so rain water not to have one

634
00:26:12,230 --> 00:26:15,769
look congratulations on it once again

635
00:26:14,450 --> 00:26:16,940
and I hope it's going to be great and

636
00:26:15,769 --> 00:26:18,409
thank you for letting us know your

637
00:26:16,940 --> 00:26:21,409
favorite plan now what is it again so we

638
00:26:18,409 --> 00:26:24,619
can go look it up hug peanut Wow can

639
00:26:21,409 --> 00:26:27,619
feel carbon black see Adam Wow and what

640
00:26:24,618 --> 00:26:30,048
website can we find your stuff on Sydney

641
00:26:27,618 --> 00:26:32,589
science comm dot a year thank you very

642
00:26:30,048 --> 00:26:32,589
much thank you

643
00:26:35,839 --> 00:26:38,970
[Music]

644
00:26:43,500 --> 00:26:51,460
[Music]

645
00:26:48,359 --> 00:26:53,979
hi I'm Yvette Don trauma aka sigh babe

646
00:26:51,460 --> 00:26:55,860
and I debunk bad science for a living

647
00:26:53,980 --> 00:26:58,059
this includes health nutrition and

648
00:26:55,859 --> 00:26:59,319
general BS on the Internet

649
00:26:58,059 --> 00:27:01,269
and I'm looking forward to seeing you

650
00:26:59,319 --> 00:27:19,329
all at skeptic on on Australia this

651
00:27:01,269 --> 00:27:22,119
October we're in the cafe Madame frou

652
00:27:19,329 --> 00:27:24,849
frou in glee this is hot popular hangout

653
00:27:22,119 --> 00:27:26,439
from four may not actually I wonder if I

654
00:27:24,849 --> 00:27:28,509
can see him he might be here later on

655
00:27:26,440 --> 00:27:31,180
I'm here with ilithyia Dean hello Olivia

656

00:27:28,509 --> 00:27:34,629
g'day Richard lovely to catch up with

657
00:27:31,180 --> 00:27:36,490
you now you're one of the organizers for

658
00:27:34,630 --> 00:27:39,010
the upcoming skeptic on I bet that's

659
00:27:36,490 --> 00:27:41,019
have a busy time for you an exciting

660
00:27:39,009 --> 00:27:42,039
time both exciting and very

661
00:27:41,019 --> 00:27:43,960
nerve-wracking

662
00:27:42,039 --> 00:27:46,750
I really hope we've got a great lineup

663
00:27:43,960 --> 00:27:48,640
that people are really going to enjoy I

664
00:27:46,750 --> 00:27:51,640
know I'm excited about it we're just

665
00:27:48,640 --> 00:27:54,910
waiting for the convention to roll round

666
00:27:51,640 --> 00:27:56,740
in October yeah and then just over a

667
00:27:54,910 --> 00:27:58,360
coffee we were chatting leave the panel

668
00:27:56,740 --> 00:28:00,220
I'm taking part in which is the good

669
00:27:58,359 --> 00:28:02,709
old-fashioned skepticism the ghosties

670
00:28:00,220 --> 00:28:04,509

and the and the paranormal and the spoon

671

00:28:02,710 --> 00:28:07,509

bending and the UFOs and things like

672

00:28:04,509 --> 00:28:09,220

that and the exciting news is Lyn Kelly

673

00:28:07,509 --> 00:28:10,809

will be joining that panel and that's

674

00:28:09,220 --> 00:28:12,240

that's fantastic she wrote a book many

675

00:28:10,809 --> 00:28:13,740

years ago called

676

00:28:12,240 --> 00:28:15,150

oh no what was it called the skeptics

677

00:28:13,740 --> 00:28:18,150

guide to paranormal or something like

678

00:28:15,150 --> 00:28:19,680

that so it's gonna be great lineup

679

00:28:18,150 --> 00:28:21,660

Carrie Poppy's joining us

680

00:28:19,680 --> 00:28:23,400

Beth darling and all sorts of people yes

681

00:28:21,660 --> 00:28:25,950

so riches panel is going to be talking

682

00:28:23,400 --> 00:28:29,580

about that will classic subjects of

683

00:28:25,950 --> 00:28:35,250

skepticism like cold reading and URI

684

00:28:29,579 --> 00:28:39,029

hunting and ghosts - ghosts exists find

685
00:28:35,250 --> 00:28:41,220
out now that that's that's going to be a

686
00:28:39,029 --> 00:28:44,279
fascinating panel and it then I think it

687
00:28:41,220 --> 00:28:46,230
will please a lot of people who remember

688
00:28:44,279 --> 00:28:47,819
the good old days of the Australian

689
00:28:46,230 --> 00:28:49,740
skeptics not that these aren't good old

690
00:28:47,819 --> 00:28:52,559
days - but what I'm talking about that

691
00:28:49,740 --> 00:28:54,420
the wonderful investigations of the UFOs

692
00:28:52,559 --> 00:28:56,190
and monsters and spoon bending and

693
00:28:54,420 --> 00:28:58,920
things like that there's a sense of the

694
00:28:56,190 --> 00:29:01,350
retro here which i think which i think

695
00:28:58,920 --> 00:29:01,740
is a bit of fun a bit of fun for

696
00:29:01,349 --> 00:29:04,319
everyone

697
00:29:01,740 --> 00:29:06,240
and who else do we have coming along I

698
00:29:04,319 --> 00:29:07,200
mean I can think of thing people like a

699
00:29:06,240 --> 00:29:09,720
doctor Karl

700
00:29:07,200 --> 00:29:11,279
yep dr. Karl is someone who's been very

701
00:29:09,720 --> 00:29:13,049
supportive at the skeptics over the

702
00:29:11,279 --> 00:29:15,779
years we're so excited to have him again

703
00:29:13,049 --> 00:29:18,779
as our opener and we're also gonna be

704
00:29:15,779 --> 00:29:21,359
seeing a Pamela gay of the Astronomy

705
00:29:18,779 --> 00:29:23,279
cast as I refer to her the most

706
00:29:21,359 --> 00:29:28,829
beautiful voice in podcasting sorry

707
00:29:23,279 --> 00:29:32,609
Richard first of all enough and we've

708
00:29:28,829 --> 00:29:34,109
also got psy babe who's been on this yep

709
00:29:32,609 --> 00:29:37,649
who's been very critical of the way I

710
00:29:34,109 --> 00:29:40,469
think as some social media influencers

711
00:29:37,650 --> 00:29:45,509
use fake science to promote nutrition

712
00:29:40,470 --> 00:29:47,130
and who was that Alan Duffy of Professor

713

00:29:45,509 --> 00:29:50,539
Alan Duffy who's gonna be talking with

714
00:29:47,130 --> 00:29:54,960
him like a about space the stars

715
00:29:50,539 --> 00:29:56,369
and it's gonna be amazing it really is

716
00:29:54,960 --> 00:29:58,799
it really is uh

717
00:29:56,369 --> 00:30:01,979
anis anytime is a good time to get your

718
00:29:58,799 --> 00:30:07,319
tickets at Convention dot sceptics calm

719
00:30:01,980 --> 00:30:10,259
today you and we hope to offer attendees

720
00:30:07,319 --> 00:30:12,299
some very special services don't we yet

721
00:30:10,259 --> 00:30:15,529
this year we're really looking to make

722
00:30:12,299 --> 00:30:17,460
the event as accessible as possible and

723
00:30:15,529 --> 00:30:19,769
one of the things that we've been

724
00:30:17,460 --> 00:30:22,350
looking into is providing a crash for

725
00:30:19,769 --> 00:30:25,379
families who might otherwise find it

726
00:30:22,349 --> 00:30:27,269
difficult to attend we've been talking

727
00:30:25,380 --> 00:30:30,320

to the venue about providing a nursing

728

00:30:27,269 --> 00:30:32,420

room and we've also been talking about

729

00:30:30,319 --> 00:30:38,159

providing Australian sign language

730

00:30:32,420 --> 00:30:40,050

interpretation services if any of your

731

00:30:38,160 --> 00:30:41,759

listeners Richard would be interested in

732

00:30:40,049 --> 00:30:44,309

accessing these services or have any

733

00:30:41,759 --> 00:30:47,210

other questions we really encourage them

734

00:30:44,309 --> 00:30:50,220

to contact us either via the website or

735

00:30:47,210 --> 00:30:52,559

by calling in to the number at the

736

00:30:50,220 --> 00:30:54,390

australian sceptics website let us know

737

00:30:52,559 --> 00:30:56,700

if this is something that you're

738

00:30:54,390 --> 00:30:57,990

interested in or if you have friends or

739

00:30:56,700 --> 00:31:00,620

family members who might need these

740

00:30:57,990 --> 00:31:03,180

services and we can definitely look at

741

00:31:00,619 --> 00:31:06,029

making it easier for you to attend and

742
00:31:03,180 --> 00:31:08,009
that's on top of the Chatswood concourse

743
00:31:06,029 --> 00:31:09,509
having some really great accessibility

744
00:31:08,009 --> 00:31:12,059
themselves for people with mobility

745
00:31:09,509 --> 00:31:13,799
issues and hearing issues absolutely

746
00:31:12,059 --> 00:31:16,319
right and I think your crisis a

747
00:31:13,799 --> 00:31:19,500
wonderful idea I can't I can't recall

748
00:31:16,319 --> 00:31:21,960
seeing one and a convention before here

749
00:31:19,500 --> 00:31:24,329
or the states where I've been to having

750
00:31:21,960 --> 00:31:26,009
a child minding facility and for those

751
00:31:24,329 --> 00:31:27,869
parents out there who do find it

752
00:31:26,009 --> 00:31:29,309
difficult to get out because they have

753
00:31:27,869 --> 00:31:33,119
to look after little ones I think it's

754
00:31:29,309 --> 00:31:34,649
it's a wonderful opportunity yes so let

755
00:31:33,119 --> 00:31:37,439
us know if this is something you need or

756
00:31:34,650 --> 00:31:39,240
want and mentioning Chatswood of course

757
00:31:37,440 --> 00:31:41,910
and again we were just chatting about it

758
00:31:39,240 --> 00:31:45,390
before the interview chat so it's got to

759
00:31:41,910 --> 00:31:46,890
be one of the most amazing areas for

760
00:31:45,390 --> 00:31:50,220
dining

761
00:31:46,890 --> 00:31:54,270
you can get any food there you are

762
00:31:50,220 --> 00:31:55,200
imagination desires I mean multicultural

763
00:31:54,269 --> 00:31:57,779
cuisine

764
00:31:55,200 --> 00:32:01,309
everywhere you look isn't it Chatswood

765
00:31:57,779 --> 00:32:04,649
really is a gem of Sydney's multi cult

766
00:32:01,309 --> 00:32:06,829
multiculturalism and there's regional

767
00:32:04,650 --> 00:32:09,570
cuisine from all over Asia

768
00:32:06,829 --> 00:32:12,960
you could eat from a different region of

769
00:32:09,569 --> 00:32:16,319
China every day and I'm getting hungry

770

00:32:12,960 --> 00:32:18,150
just even talking about it right now and

771
00:32:16,319 --> 00:32:20,129
we'll be there so folks there's the clue

772
00:32:18,150 --> 00:32:21,930
once again convention dot skeptics

773
00:32:20,130 --> 00:32:24,240
dot-com data you check it out see who's

774
00:32:21,930 --> 00:32:28,110
coming along check out all the speakers

775
00:32:24,240 --> 00:32:30,390
and yeah if you're interested in the

776
00:32:28,109 --> 00:32:33,419
crash service or maybe you'd like some

777
00:32:30,390 --> 00:32:35,610
help with the sign language please let

778
00:32:33,420 --> 00:32:36,900
us know let us know and we'll know if

779
00:32:35,609 --> 00:32:38,699
we're on the right track well

780
00:32:36,900 --> 00:32:40,259
Alethea we've still got a lot of work to

781
00:32:38,700 --> 00:32:42,870
do before the convention rolls around

782
00:32:40,259 --> 00:32:44,789
but it's all looking very exciting yep

783
00:32:42,869 --> 00:32:46,689
see how much I can pawn off to you

784
00:32:44,789 --> 00:32:54,980

Richard

785

00:32:46,690 --> 00:32:54,980
[Music]

786

00:33:01,869 --> 00:33:07,099
hey Richard

787

00:33:03,470 --> 00:33:07,579
oh hi Trish hi Wow would you like a

788

00:33:07,099 --> 00:33:08,990
coffee

789

00:33:07,579 --> 00:33:11,480
yeah thanks what you're working on

790

00:33:08,990 --> 00:33:13,539
trying to come up with a new promo to

791

00:33:11,480 --> 00:33:16,400
play on the sceptic zone who's it for

792

00:33:13,539 --> 00:33:18,980
the good thinking society in the UK you

793

00:33:16,400 --> 00:33:20,900
know Michael Marshall Simon Singh Norah

794

00:33:18,980 --> 00:33:22,549
Thomas in the background oh yeah I know

795

00:33:20,900 --> 00:33:25,000
them they've been doing some great work

796

00:33:22,549 --> 00:33:27,710
investigating veterinary homeopathy

797

00:33:25,000 --> 00:33:29,509
veterinary homeopathy what you sugarpill

798

00:33:27,710 --> 00:33:30,950
this for cows I know right

799

00:33:29,509 --> 00:33:32,629

and also they're looking at some of the

800

00:33:30,950 --> 00:33:35,150

dodgy medical advice given by UK

801

00:33:32,630 --> 00:33:37,190

chiropractors really okay look I'll

802

00:33:35,150 --> 00:33:42,220

mention all that in the promo now their

803

00:33:37,190 --> 00:33:44,539

website is good thinking society dog and

804

00:33:42,220 --> 00:33:46,160

they've recently been reporting on the

805

00:33:44,539 --> 00:33:49,279

resurgence of faith healer peter Popoff

806

00:33:46,160 --> 00:33:52,600

you know okay look thanks for that it

807

00:33:49,279 --> 00:33:52,599

gives me something good to think about

808

00:33:57,329 --> 00:34:10,038

[Music]

809

00:34:10,300 --> 00:34:14,810

I'm just walking into the Powerhouse

810

00:34:12,530 --> 00:34:17,269

Museum here in Sydney where tonight they

811

00:34:14,809 --> 00:34:19,219

have a speed meet the scientists night a

812

00:34:17,269 --> 00:34:22,759

roomful of scientists you can sit down

813
00:34:19,219 --> 00:34:24,769
and have a chat to many people pairing

814
00:34:22,760 --> 00:34:27,260
many aspects of science many disciplines

815
00:34:24,769 --> 00:34:28,730
and there are so many in fact that I

816
00:34:27,260 --> 00:34:30,350
think this will be a series of

817
00:34:28,730 --> 00:34:33,199
interviews over the next couple of weeks

818
00:34:30,349 --> 00:34:35,389
but if I make my way down this escalator

819
00:34:33,199 --> 00:34:37,489
around the corner there's people milling

820
00:34:35,389 --> 00:34:40,609
about already and I'll head for the room

821
00:34:37,489 --> 00:34:48,949
of scientists for part one of speed meet

822
00:34:40,610 --> 00:34:50,599
the scientists it's meet the scientist

823
00:34:48,949 --> 00:34:54,168
night here at the Powerhouse Museum it's

824
00:34:50,599 --> 00:34:56,480
my first table first scientist I've just

825
00:34:54,168 --> 00:34:59,420
come in before the crowds head your way

826
00:34:56,480 --> 00:35:02,389
hello who do we have here no I'm Camilla

827

00:34:59,420 --> 00:35:04,340
Hoyos and what's your or a creaky table

828
00:35:02,389 --> 00:35:07,460
apart from the creaky table what's your

829
00:35:04,340 --> 00:35:09,539
area sleep so I'm interested in how

830
00:35:07,460 --> 00:35:12,269
sleep affects our health

831
00:35:09,539 --> 00:35:15,570
and how we can improve sleep to also try

832
00:35:12,269 --> 00:35:17,190
and ward off health conditions I think a

833
00:35:15,570 --> 00:35:19,860
lot of my audience would be very

834
00:35:17,190 --> 00:35:21,780
interested I'll tell you something that

835
00:35:19,860 --> 00:35:23,160
I found over the years that helps me

836
00:35:21,780 --> 00:35:23,730
sleep and you've probably heard this

837
00:35:23,159 --> 00:35:27,029
before

838
00:35:23,730 --> 00:35:32,250
there's just listening to podcasts or

839
00:35:27,030 --> 00:35:34,019
something in your ears is similar to

840
00:35:32,250 --> 00:35:36,000
listening to the ocean or the rain on

841
00:35:34,019 --> 00:35:39,570

the roof do you think I guess it could

842

00:35:36,000 --> 00:35:42,539

be so what we know is listening can help

843

00:35:39,570 --> 00:35:44,880

because watching something often can

844

00:35:42,539 --> 00:35:47,840

stop us from falling asleep and having

845

00:35:44,880 --> 00:35:51,750

light near us because that is alert and

846

00:35:47,840 --> 00:35:54,780

can stop our normal rhythms from telling

847

00:35:51,750 --> 00:35:56,460

us how to go to sleep and so it's I

848

00:35:54,780 --> 00:35:58,820

guess it's very individual so some

849

00:35:56,460 --> 00:36:01,139

people might find listening to something

850

00:35:58,820 --> 00:36:03,300

alerting again or it might bring out

851

00:36:01,139 --> 00:36:05,639

something I guess but other people would

852

00:36:03,300 --> 00:36:08,490

find it soothing and you know and a lot

853

00:36:05,639 --> 00:36:10,079

of people do find that they you know you

854

00:36:08,489 --> 00:36:12,719

can get machines and stuff I guess it's

855

00:36:10,079 --> 00:36:14,219

very individual and personal that if you

856
00:36:12,719 --> 00:36:15,929
like to hear something that's repetitive

857
00:36:14,219 --> 00:36:18,359
or if you like to listen to something

858
00:36:15,929 --> 00:36:20,039
but if you're listening and making an

859
00:36:18,360 --> 00:36:22,260
effort to listen then for some people

860
00:36:20,039 --> 00:36:24,630
maybe that would mean that you wouldn't

861
00:36:22,260 --> 00:36:25,950
fall asleep as easily that's why so many

862
00:36:24,630 --> 00:36:28,980
people fall asleep listening to my show

863
00:36:25,949 --> 00:36:31,739
because I'm sure they're listening

864
00:36:28,980 --> 00:36:33,269
intently to what you have to say but did

865
00:36:31,739 --> 00:36:35,489
the rain on the roof is a classic isn't

866
00:36:33,269 --> 00:36:38,219
it it gets it's like a lullaby in a way

867
00:36:35,489 --> 00:36:40,379
yeah and I guess the ocean and I like

868
00:36:38,219 --> 00:36:42,750
that but not everyone will I guess it's

869
00:36:40,380 --> 00:36:43,860
yeah different what's the biggest

870
00:36:42,750 --> 00:36:45,480
problem you've come across in your

871
00:36:43,860 --> 00:36:46,260
research with people trying to get a

872
00:36:45,480 --> 00:36:49,349
good night's sleep

873
00:36:46,260 --> 00:36:52,350
so what I look at is sleep disorders I

874
00:36:49,349 --> 00:36:56,400
see write specific disorders yes yeah so

875
00:36:52,349 --> 00:36:59,969
on mostly sleep apnea so we know sleep

876
00:36:56,400 --> 00:37:03,150
apnea is very common and it results in

877
00:36:59,969 --> 00:37:05,789
people having fragmented or disrupted

878
00:37:03,150 --> 00:37:07,860
sleep because when they go to start to

879
00:37:05,789 --> 00:37:10,800
get into deep sleep they can stop to

880
00:37:07,860 --> 00:37:12,809
stop to breathe and so they can stop and

881
00:37:10,800 --> 00:37:14,940
then they their body has to wake them up

882
00:37:12,809 --> 00:37:16,719
and so even though they're not they

883
00:37:14,940 --> 00:37:18,730
might not know that they're waking up

884

00:37:16,719 --> 00:37:20,469
kind of going to sleep then waking up

885
00:37:18,730 --> 00:37:22,420
and going to sleep and waking up

886
00:37:20,469 --> 00:37:24,369
so these couldn't be you know mean that

887
00:37:22,420 --> 00:37:25,500
we're sleeping the same amount of time

888
00:37:24,369 --> 00:37:28,150
but they're not having a nice

889
00:37:25,500 --> 00:37:30,030
consolidated sleep and so what we're

890
00:37:28,150 --> 00:37:32,470
interested in is how these affects

891
00:37:30,030 --> 00:37:34,810
health outcomes and there's a lot of

892
00:37:32,469 --> 00:37:37,029
research out there to show that people

893
00:37:34,809 --> 00:37:39,549
can be obviously sleepy the next day and

894
00:37:37,030 --> 00:37:41,230
it can affect alertness and function but

895
00:37:39,550 --> 00:37:43,660
there's been a lot of research into if

896
00:37:41,230 --> 00:37:46,179
it can affect our body and our health

897
00:37:43,659 --> 00:37:48,759
and so we've previously looked at its

898
00:37:46,179 --> 00:37:52,750

links with conditions like obesity and

899

00:37:48,760 --> 00:37:55,810

diabetes and now I'm more in the area of

900

00:37:52,750 --> 00:38:01,480

healthy brain aging and cognitive

901

00:37:55,809 --> 00:38:03,460

impairment Wow Wow you're blowing my

902

00:38:01,480 --> 00:38:05,230

mind and I think I've better go and have

903

00:38:03,460 --> 00:38:06,880

a good night's sleep after that and

904

00:38:05,230 --> 00:38:08,530

where if people want to find out more

905

00:38:06,880 --> 00:38:10,780

about what you do I you online

906

00:38:08,530 --> 00:38:13,540

did your work online yes I'm at the

907

00:38:10,780 --> 00:38:15,010

University of Sydney but also at the

908

00:38:13,539 --> 00:38:17,559

wall Koch Institute of medical research

909

00:38:15,010 --> 00:38:20,470

so we have a big sleep group there and

910

00:38:17,559 --> 00:38:21,940

also a sleep clinic a big sleep group I

911

00:38:20,469 --> 00:38:25,419

could just picture it now lots of beds

912

00:38:21,940 --> 00:38:27,130

and everyone just crashes there thank

913
00:38:25,420 --> 00:38:31,990
you very much thank you so much thank

914
00:38:27,130 --> 00:38:33,760
you I was walking past all the

915
00:38:31,989 --> 00:38:37,029
scientists minding my own business when

916
00:38:33,760 --> 00:38:39,130
Abbey appeared that is it's made out of

917
00:38:37,030 --> 00:38:42,519
what pipe cleaners and lots of things an

918
00:38:39,130 --> 00:38:46,630
electric toothbrush pipe cleaners some

919
00:38:42,519 --> 00:38:51,130
modelling clay some recycled from

920
00:38:46,630 --> 00:38:54,250
fabrics and it is a blue band babe which

921
00:38:51,130 --> 00:38:58,210
a buzz pollinators who can vibrate the

922
00:38:54,250 --> 00:39:00,070
head at 350 times per second in order to

923
00:38:58,210 --> 00:39:00,400
shake the pollen out of plants how cool

924
00:39:00,070 --> 00:39:02,620
is that

925
00:39:00,400 --> 00:39:04,840
good grief and who do we have here by

926
00:39:02,619 --> 00:39:07,089
the way my name is Emily Van de stock

927
00:39:04,840 --> 00:39:09,309
I'm a PhD researcher at the university

928
00:39:07,090 --> 00:39:13,390
city and I'm researching the role of

929
00:39:09,309 --> 00:39:15,639
native bees in urban places and what's

930
00:39:13,389 --> 00:39:16,949
the big difference between native bee

931
00:39:15,639 --> 00:39:19,799
and

932
00:39:16,949 --> 00:39:22,919
be the bee we see every day which is not

933
00:39:19,800 --> 00:39:26,640
native am i right yes sir

934
00:39:22,920 --> 00:39:28,380
we have over 1,700 species of native

935
00:39:26,639 --> 00:39:30,509
face ah really

936
00:39:28,380 --> 00:39:32,760
yeah and that's the ones that we know of

937
00:39:30,510 --> 00:39:35,520
this probably so many more

938
00:39:32,760 --> 00:39:36,839
so all these budding budding ecologists

939
00:39:35,519 --> 00:39:38,969
out there if you just keep looking

940
00:39:36,838 --> 00:39:41,690
around the bees and learn some taxonomy

941

00:39:38,969 --> 00:39:45,949
might be able to name your own species

942
00:39:41,690 --> 00:39:48,570
but the honeybee is just one species

943
00:39:45,949 --> 00:39:51,480
that is actually an introduced species

944
00:39:48,570 --> 00:39:54,420
in Australia it's the one that people

945
00:39:51,480 --> 00:39:56,039
would know as the classic be the native

946
00:39:54,420 --> 00:39:56,220
bees make their own honey I guess they

947
00:39:56,039 --> 00:39:59,730
do

948
00:39:56,219 --> 00:40:01,769
yes some native bees do make honey in

949
00:39:59,730 --> 00:40:04,650
Sydney we have a stingless bee called

950
00:40:01,769 --> 00:40:07,469
the Tetragon yellow carbon area and I

951
00:40:04,650 --> 00:40:09,690
say that's so well I kind of think of

952
00:40:07,469 --> 00:40:11,819
them like a pterodactyl in a carbonara

953
00:40:09,690 --> 00:40:14,730
pasta that's one way to remember them

954
00:40:11,820 --> 00:40:16,530
and they do make honey they make this

955
00:40:14,730 --> 00:40:18,889

beautiful lemony honey and they also

956

00:40:16,530 --> 00:40:22,410

have these amazing spiral shaped hives

957

00:40:18,889 --> 00:40:24,629

and do the the bee that we know that is

958

00:40:22,409 --> 00:40:27,179

European is that right yeah the European

959

00:40:24,630 --> 00:40:29,490

honey bee or at the smell liver up is it

960

00:40:27,179 --> 00:40:32,279

science named to its friends right yes

961

00:40:29,489 --> 00:40:34,649

yeah yeah just do its name and is that

962

00:40:32,280 --> 00:40:38,099

been a huge disruption to the local bees

963

00:40:34,650 --> 00:40:40,410

or they all get on famously well sir

964

00:40:38,099 --> 00:40:44,338

the introduced honey bees have been here

965

00:40:40,409 --> 00:40:48,239

for a very long time now and recent

966

00:40:44,338 --> 00:40:50,190

research shows that generally so long as

967

00:40:48,239 --> 00:40:52,409

there's enough flowers and enough of the

968

00:40:50,190 --> 00:40:54,750

food source and habitat for all the bees

969

00:40:52,409 --> 00:40:57,899

to share that they're not really

970
00:40:54,750 --> 00:41:00,059
competing too much so if there's enough

971
00:40:57,900 --> 00:41:01,588
flowers and resources all the bees can

972
00:41:00,059 --> 00:41:04,289
live in harmony but if there's not

973
00:41:01,588 --> 00:41:06,869
enough so if we keep you know with

974
00:41:04,289 --> 00:41:08,880
habitat destruction and development and

975
00:41:06,869 --> 00:41:11,130
not providing enough green spaces that's

976
00:41:08,880 --> 00:41:12,210
when we might be seeing some competitive

977
00:41:11,130 --> 00:41:14,820
things happening

978
00:41:12,210 --> 00:41:16,139
but this is all like research that's

979
00:41:14,820 --> 00:41:19,769
happening at the moment so watch that

980
00:41:16,139 --> 00:41:21,480
space cutting-edge research about bees

981
00:41:19,769 --> 00:41:23,670
thank you very much has been very

982
00:41:21,480 --> 00:41:25,980
interesting I shall look up Australian

983
00:41:23,670 --> 00:41:31,320
bees yeah and definitely check out the

984
00:41:25,980 --> 00:41:34,199
blue band Bay 350 per second emeritus

985
00:41:31,320 --> 00:41:35,970
buzzing amazing beautiful native babe

986
00:41:34,199 --> 00:41:37,739
and if people want to find out more

987
00:41:35,969 --> 00:41:39,858
about your particular researcher you

988
00:41:37,739 --> 00:41:43,979
online anywhere yes you can go to

989
00:41:39,858 --> 00:41:46,139
cross-pollinating org and it's about

990
00:41:43,980 --> 00:41:48,420
cross pollinating community ecology

991
00:41:46,139 --> 00:41:50,848
citizen science native bees in the city

992
00:41:48,420 --> 00:41:56,820
I love that thank you very much thank

993
00:41:50,849 --> 00:41:58,859
you so much come to another table and

994
00:41:56,820 --> 00:42:01,260
who do we have here I'm Alex Thompson

995
00:41:58,858 --> 00:42:03,838
from jcrane biotech hub at UTSA and

996
00:42:01,260 --> 00:42:06,630
what's your area why you here what you

997
00:42:03,838 --> 00:42:09,000
want to tell people so I am first and

998

00:42:06,630 --> 00:42:11,579
foremost a marine ecologist but what I'm

999
00:42:09,000 --> 00:42:13,530
doing now is looking at algae biotech

1000
00:42:11,579 --> 00:42:15,000
and how we can use algae biotech to

1001
00:42:13,530 --> 00:42:18,990
change the face of a whole bunch of

1002
00:42:15,000 --> 00:42:20,760
industries how so so algae more

1003
00:42:18,989 --> 00:42:22,259
specifically microalgae is this really

1004
00:42:20,760 --> 00:42:25,140
amazing organism that we can pull

1005
00:42:22,260 --> 00:42:26,970
proteins and fats and all sorts of

1006
00:42:25,139 --> 00:42:29,159
sugars and stuff out of and use it to

1007
00:42:26,969 --> 00:42:31,588
make things like plastics use it for

1008
00:42:29,159 --> 00:42:32,969
things in agriculture and aquaculture we

1009
00:42:31,588 --> 00:42:34,909
can use it to make pharmaceuticals

1010
00:42:32,969 --> 00:42:39,149
vaccinations nutraceuticals

1011
00:42:34,909 --> 00:42:41,279
so I managed this degree in biotech hub

1012
00:42:39,150 --> 00:42:43,349

which we are basically kind of promoting

1013

00:42:41,280 --> 00:42:44,670

algae as the next frontier across a

1014

00:42:43,349 --> 00:42:46,710

bunch of different industries and

1015

00:42:44,670 --> 00:42:49,349

helping to educate engage with people

1016

00:42:46,710 --> 00:42:52,019

about just how amazing it is and what

1017

00:42:49,349 --> 00:42:54,450

led you to this branch of research it's

1018

00:42:52,019 --> 00:42:57,929

what should I say it's not exactly

1019

00:42:54,449 --> 00:43:00,000

obscure but it's a little unusual so as

1020

00:42:57,929 --> 00:43:02,009

I say I do my PhD in marine ecology and

1021

00:43:00,000 --> 00:43:04,710

I did it within a Research Institute

1022

00:43:02,010 --> 00:43:05,880

that had a really diverse an amazing

1023

00:43:04,710 --> 00:43:08,099

group of researchers that were

1024

00:43:05,880 --> 00:43:10,920

researching everything from like seafood

1025

00:43:08,099 --> 00:43:14,220

safety to corals to really hardcore sort

1026

00:43:10,920 --> 00:43:15,510

of biotech type things and the Research

1027
00:43:14,219 --> 00:43:16,739
Institute came up with an opportunity

1028
00:43:15,510 --> 00:43:18,420
that was presented by a department of

1029
00:43:16,739 --> 00:43:20,729
industry to create this le biotech hub

1030
00:43:18,420 --> 00:43:22,860
and I was there and just saw it as an

1031
00:43:20,730 --> 00:43:24,269
amazing opportunity not only you know

1032
00:43:22,860 --> 00:43:25,769
this is kind of a scientists dream you

1033
00:43:24,269 --> 00:43:28,170
know it's it's taking something that's

1034
00:43:25,769 --> 00:43:29,190
sustainable and biological and showing

1035
00:43:28,170 --> 00:43:30,930
it to people and saying look at this

1036
00:43:29,190 --> 00:43:33,300
amazing thing look what it can do and

1037
00:43:30,929 --> 00:43:36,210
you know really potentially having a

1038
00:43:33,300 --> 00:43:38,100
massive impact on things around us and

1039
00:43:36,210 --> 00:43:40,740
what has taken you by surprise in your

1040
00:43:38,099 --> 00:43:42,869
research anything in particular I just

1041
00:43:40,739 --> 00:43:45,389
think the diverse range of applications

1042
00:43:42,869 --> 00:43:46,799
that something like this can have I

1043
00:43:45,389 --> 00:43:48,929
think that we are really at the

1044
00:43:46,800 --> 00:43:50,970
forefront and you know there is there is

1045
00:43:48,929 --> 00:43:53,190
massive potential for so many things to

1046
00:43:50,969 --> 00:43:54,569
change because of this we're wanting to

1047
00:43:53,190 --> 00:43:56,099
make our world more sustainable wanting

1048
00:43:54,570 --> 00:43:58,590
to make industries more sustainable and

1049
00:43:56,099 --> 00:44:00,539
this presents such an opportunity across

1050
00:43:58,590 --> 00:44:02,640
such a wide range of industries and

1051
00:44:00,539 --> 00:44:03,869
spaces and I don't think we've ever seen

1052
00:44:02,639 --> 00:44:05,940
something like this before

1053
00:44:03,869 --> 00:44:09,989
and you can eat it and you can eat it

1054
00:44:05,940 --> 00:44:11,250
absolutely that's absolutely first thing

1055

00:44:09,989 --> 00:44:20,459
well thank you very much and all the

1056
00:44:11,250 --> 00:44:25,590
best of your research Thank You Frankie

1057
00:44:20,460 --> 00:44:28,230
Lee hello hi I've just been meeting

1058
00:44:25,590 --> 00:44:30,000
every sign - oh I've still got some more

1059
00:44:28,230 --> 00:44:30,480
to go I think but so many fascinating

1060
00:44:30,000 --> 00:44:32,820
people

1061
00:44:30,480 --> 00:44:34,530
now you're really responsible for

1062
00:44:32,820 --> 00:44:35,580
putting this wonderful speed meet the

1063
00:44:34,530 --> 00:44:38,100
scientists night together

1064
00:44:35,579 --> 00:44:40,829
I am yeah I've been doing this since we

1065
00:44:38,099 --> 00:44:43,380
did the first one in 2006 at the ultimo

1066
00:44:40,829 --> 00:44:45,779
Science Festival at ABC and it's

1067
00:44:43,380 --> 00:44:53,010
happened every year since then what you

1068
00:44:45,780 --> 00:44:54,870
use it so that's 12 years we must say -

1069
00:44:53,010 --> 00:44:56,220

I mean this is the powerhouse museum and

1070

00:44:54,869 --> 00:44:58,019

other areas open and there's lots of

1071

00:44:56,219 --> 00:44:59,699

people sort of mingling but they do find

1072

00:44:58,019 --> 00:45:01,170

their way here to the room of scientists

1073

00:44:59,699 --> 00:45:03,210

and we look around now and there are

1074

00:45:01,170 --> 00:45:04,980

tables set up everywhere and they're

1075

00:45:03,210 --> 00:45:07,170

more and more people coming sitting with

1076

00:45:04,980 --> 00:45:09,000

the scientists having a chat learning

1077

00:45:07,170 --> 00:45:10,740

all sorts of things it's a really great

1078

00:45:09,000 --> 00:45:13,320

initiative and I wouldn't be surprised

1079

00:45:10,739 --> 00:45:16,739

Frank E if this is copied all around the

1080

00:45:13,320 --> 00:45:18,090

world well I think it it has taken off

1081

00:45:16,739 --> 00:45:19,559

you here bet people doing this and they

1082

00:45:18,090 --> 00:45:21,570

think it's just a normal thing to do now

1083

00:45:19,559 --> 00:45:24,210

so it used to be kind of unusual idea

1084
00:45:21,570 --> 00:45:26,250
and usually once the place is filled

1085
00:45:24,210 --> 00:45:27,710
with customers talking to scientists you

1086
00:45:26,250 --> 00:45:29,449
can't stop them

1087
00:45:27,710 --> 00:45:31,519
in fact I try to ring the bell and get

1088
00:45:29,449 --> 00:45:33,710
them to move on you can't get them they

1089
00:45:31,519 --> 00:45:35,480
just all we're just Chat Chat Chat the

1090
00:45:33,710 --> 00:45:37,608
scientists won't stop to eat or drink

1091
00:45:35,480 --> 00:45:39,858
we're thinking getting like glucose

1092
00:45:37,608 --> 00:45:43,338
intravenous drips for them to get them

1093
00:45:39,858 --> 00:45:44,869
going for the three hours it's a

1094
00:45:43,338 --> 00:45:47,150
wonderful thing thank you it's a great

1095
00:45:44,869 --> 00:45:50,930
sign well you know what I'm going to

1096
00:45:47,150 --> 00:45:55,220
dive in and see if I can't just check to

1097
00:45:50,929 --> 00:45:57,710
a few more and now we're still keeping

1098
00:45:55,219 --> 00:46:00,049
with the marine theme here and who do we

1099
00:45:57,710 --> 00:46:02,480
have my name is Cara and I'm a PhD

1100
00:46:00,050 --> 00:46:04,280
student at the University of Sydney and

1101
00:46:02,480 --> 00:46:06,108
why are you here what you want to talk

1102
00:46:04,280 --> 00:46:09,470
to people about I want to talk to people

1103
00:46:06,108 --> 00:46:11,150
about crustaceans and why taxonomy and

1104
00:46:09,469 --> 00:46:14,149
systematics is important for

1105
00:46:11,150 --> 00:46:16,639
conservation and how we can use fossils

1106
00:46:14,150 --> 00:46:19,068
and by geographical events to determine

1107
00:46:16,639 --> 00:46:20,420
how old these groups are it's

1108
00:46:19,068 --> 00:46:25,308
interesting because right in front of me

1109
00:46:20,420 --> 00:46:27,409
on the desk here we have I think I've

1110
00:46:25,309 --> 00:46:29,480
broken your crustacean what is that one

1111
00:46:27,409 --> 00:46:32,960
I'm looking at this this is a mantis

1112

00:46:29,480 --> 00:46:36,530
shrimp so that does come off yes it's a

1113
00:46:32,960 --> 00:46:39,230
mallard cost rican crustacean so they

1114
00:46:36,530 --> 00:46:40,819
contain your crabs in your Decker pods

1115
00:46:39,230 --> 00:46:42,139
so it's a specific group within

1116
00:46:40,818 --> 00:46:45,500
crustacean known as the higher

1117
00:46:42,139 --> 00:46:48,139
crustaceans and these guys are steamed

1118
00:46:45,500 --> 00:46:50,150
out of pods and you've probably heard of

1119
00:46:48,139 --> 00:46:52,308
them on David Attenborough these are the

1120
00:46:50,150 --> 00:46:53,568
guys that you sort of don't want to keep

1121
00:46:52,309 --> 00:46:55,970
in aquariums and you don't want to get

1122
00:46:53,568 --> 00:46:59,179
too close to because they have a strike

1123
00:46:55,969 --> 00:47:01,399
on using these appendages here which

1124
00:46:59,179 --> 00:47:04,639
exhibits a force similar to that of a 22

1125
00:47:01,400 --> 00:47:07,789
caliber bullet so them right now you've

1126
00:47:04,639 --> 00:47:10,489

mentioned it yes I've seen the videos of

1127

00:47:07,789 --> 00:47:12,920

these little creatures unleashing an

1128

00:47:10,489 --> 00:47:14,959

incredible punch isn't it yes it's

1129

00:47:12,920 --> 00:47:17,568

incredible and they're very small and

1130

00:47:14,960 --> 00:47:20,179

they have this cavitation bubble and

1131

00:47:17,568 --> 00:47:21,829

yeah it's an or its enormous ly fast

1132

00:47:20,179 --> 00:47:23,539

it's actually they hold the record for

1133

00:47:21,829 --> 00:47:26,599

the fastest punch in the animal kingdom

1134

00:47:23,539 --> 00:47:27,829

it's it's insanely fast and you don't

1135

00:47:26,599 --> 00:47:29,510

want them to hit you because the bigger

1136

00:47:27,829 --> 00:47:30,980

species they can actually break your

1137

00:47:29,510 --> 00:47:35,040

finger so

1138

00:47:30,980 --> 00:47:37,590

yes I have a pet at home and fortunately

1139

00:47:35,039 --> 00:47:39,929

she's not too big but she has nipped me

1140

00:47:37,590 --> 00:47:44,190

a couple of times and it's it's

1141
00:47:39,929 --> 00:47:46,230
definitely scary yes Wow Wow

1142
00:47:44,190 --> 00:47:47,460
and no it's great because right in front

1143
00:47:46,230 --> 00:47:49,800
of me here you have other things on the

1144
00:47:47,460 --> 00:47:52,289
table big wonderful color photograph and

1145
00:47:49,800 --> 00:47:53,430
a little diagram here of other little

1146
00:47:52,289 --> 00:47:54,599
creatures but I love the little model

1147
00:47:53,429 --> 00:47:57,149
here that looks fantastic

1148
00:47:54,599 --> 00:47:58,950
that's life-size is it there are species

1149
00:47:57,150 --> 00:48:00,539
that are about that size so they range

1150
00:47:58,949 --> 00:48:02,909
from you know from about a centimeter to

1151
00:48:00,539 --> 00:48:05,250
over 30 centimeters so it's quite a

1152
00:48:02,909 --> 00:48:07,108
broad spectrum actually of size yeah oh

1153
00:48:05,250 --> 00:48:08,940
all the best and then don't get punched

1154
00:48:07,108 --> 00:48:10,440
out too often huh yes that's very true

1155
00:48:08,940 --> 00:48:14,639
don't want to run into one in a dark

1156
00:48:10,440 --> 00:48:16,740
alley thank you thank you that was part

1157
00:48:14,639 --> 00:48:18,719
one of speed meet the scientists at the

1158
00:48:16,739 --> 00:48:20,848
Powerhouse Museum play of signs week

1159
00:48:18,719 --> 00:48:24,019
tune in next week to the skipping zone

1160
00:48:20,849 --> 00:48:24,019
for part two

1161
00:48:26,349 --> 00:48:42,339
[Music]

1162
00:48:40,329 --> 00:48:45,039
this is Kyle from the data skeptic

1163
00:48:42,340 --> 00:48:47,410
podcast if you're curious about the way

1164
00:48:45,039 --> 00:48:49,869
data is changing our world topics like

1165
00:48:47,409 --> 00:48:52,449
AI and all this craziness with Facebook

1166
00:48:49,869 --> 00:48:54,250
and BOTS and the Twitter storm and how

1167
00:48:52,449 --> 00:48:56,319
the algorithms that underline that work

1168
00:48:54,250 --> 00:48:57,909
and you don't want a technical deep dive

1169

00:48:56,320 --> 00:48:59,320
you want it you know in the vernacular

1170
00:48:57,909 --> 00:49:01,029
in a way that people can understand

1171
00:48:59,320 --> 00:49:03,100
check us out at data skeptic that's what

1172
00:49:01,030 --> 00:49:04,960
we try and do I interview advanced

1173
00:49:03,099 --> 00:49:06,670
professionals in the field who do this

1174
00:49:04,960 --> 00:49:11,320
sort of research and then I get into

1175
00:49:06,670 --> 00:49:13,119
interesting projects as well we're a

1176
00:49:11,320 --> 00:49:44,260
weekly show and you can find this data

1177
00:49:13,119 --> 00:49:46,079
skeptic calm I'm a writer I research

1178
00:49:44,260 --> 00:49:48,370
last year I had a book come out called

1179
00:49:46,079 --> 00:49:50,440
the secret code breakers of Central

1180
00:49:48,369 --> 00:49:51,940
Bureau which was basically history of

1181
00:49:50,440 --> 00:49:53,970
Australian code breaking in signals

1182
00:49:51,940 --> 00:49:58,240
intelligence in the Second World War

1183
00:49:53,969 --> 00:50:00,159

currently I'm writing a book on a very

1184

00:49:58,239 --> 00:50:02,739

well sort of a tangential topic to that

1185

00:50:00,159 --> 00:50:05,440

one on a woman called Florence Bart

1186

00:50:02,739 --> 00:50:13,089

Mackenzie so who was Florence Mackenzie

1187

00:50:05,440 --> 00:50:16,000

well she was a pretty amazing person in

1188

00:50:13,090 --> 00:50:17,980

that she was Australia's first female

1189

00:50:16,000 --> 00:50:23,530

electrical engineer she got her diploma

1190

00:50:17,980 --> 00:50:25,990

in 1923 and when war broke out in other

1191

00:50:23,530 --> 00:50:28,000

when the Second World War started she

1192

00:50:25,989 --> 00:50:30,250

was still Australia's only female

1193

00:50:28,000 --> 00:50:32,769

electrical engineer so she's

1194

00:50:30,250 --> 00:50:35,590

historically significant on that Ally

1195

00:50:32,769 --> 00:50:39,489

she also was very involved in the early

1196

00:50:35,590 --> 00:50:41,740

radio industry and getting radio and

1197

00:50:39,489 --> 00:50:43,039

wireless up and running in in Australia

1198
00:50:41,739 --> 00:50:45,079
she yeah

1199
00:50:43,039 --> 00:50:46,759
magazine called Wireless weekly which

1200
00:50:45,079 --> 00:50:49,400
turned into a publishing juggernaut

1201
00:50:46,760 --> 00:50:51,740
she wasn't inventor she was a poet she

1202
00:50:49,400 --> 00:50:53,990
started a shot called the wireless shot

1203
00:50:51,739 --> 00:50:56,000
was turned into an enormous retail

1204
00:50:53,989 --> 00:50:58,509
business ended up getting bought out by

1205
00:50:56,000 --> 00:51:00,889
I think RadioShack something like that

1206
00:50:58,510 --> 00:51:03,260
that might not be right but anyway so

1207
00:51:00,889 --> 00:51:05,329
she she did a lot of amazing things but

1208
00:51:03,260 --> 00:51:07,310
the biggest life accomplishment was

1209
00:51:05,329 --> 00:51:09,860
really during the Second World War she

1210
00:51:07,309 --> 00:51:14,960
trained thousands of women and men in

1211
00:51:09,860 --> 00:51:16,760
Morse code and signals Morse code was a

1212
00:51:14,960 --> 00:51:18,079
very big part of the sort of

1213
00:51:16,760 --> 00:51:19,940
communications infrastructure of the

1214
00:51:18,079 --> 00:51:22,340
country it's not now but it was then and

1215
00:51:19,940 --> 00:51:23,389
and she saw the war was probably gonna

1216
00:51:22,340 --> 00:51:24,740
happen and thought you know what they

1217
00:51:23,389 --> 00:51:26,239
get a run out of people who can do this

1218
00:51:24,739 --> 00:51:28,250
stuff but not just Morse put all sorts

1219
00:51:26,239 --> 00:51:31,129
of signaling and to leg release skills

1220
00:51:28,250 --> 00:51:32,539
so she just offer I'm back didn't ask

1221
00:51:31,130 --> 00:51:34,820
for permission no government money

1222
00:51:32,539 --> 00:51:37,130
nothing just started a school in Sydney

1223
00:51:34,820 --> 00:51:39,500
anybody who wants to come on learn Morse

1224
00:51:37,130 --> 00:51:41,780
code come on and so she got all these

1225
00:51:39,500 --> 00:51:43,730
women coming along and learning Morse

1226

00:51:41,780 --> 00:51:47,050
code and something sure enough she was

1227
00:51:43,730 --> 00:51:49,849
right and the military ran out of people

1228
00:51:47,050 --> 00:51:52,190
who could use signals people and they

1229
00:51:49,849 --> 00:51:53,719
were appealing to the public and so she

1230
00:51:52,190 --> 00:51:55,789
went to them and went to the government

1231
00:51:53,719 --> 00:51:57,889
and she said I've trained 2,000 women in

1232
00:51:55,789 --> 00:52:00,469
this stuff up to the standards required

1233
00:51:57,889 --> 00:52:06,079
by the military do you want them oh and

1234
00:52:00,469 --> 00:52:07,730
they said no maybe to take them but um

1235
00:52:06,079 --> 00:52:10,819
she was responsible for getting women to

1236
00:52:07,730 --> 00:52:12,619
the into the Navy and you know there's

1237
00:52:10,820 --> 00:52:15,050
much beloved by all the people that went

1238
00:52:12,619 --> 00:52:17,839
through her signal schools for people

1239
00:52:15,050 --> 00:52:19,490
listening the connection with central

1240
00:52:17,840 --> 00:52:21,829

bureau which was a code-breaking in the

1241
00:52:19,489 --> 00:52:25,069
signals intelligence operation was that

1242
00:52:21,829 --> 00:52:27,739
many of the people even that Mrs. Mac

1243
00:52:25,070 --> 00:52:30,260
trained ended up going into intelligence

1244
00:52:27,739 --> 00:52:32,629
operations in Australia and working for

1245
00:52:30,260 --> 00:52:34,900
intelligence organisations because of

1246
00:52:32,630 --> 00:52:36,800
their skills with wireless and Morse

1247
00:52:34,900 --> 00:52:38,329
so that's the connection and that's

1248
00:52:36,800 --> 00:52:40,220
actually how I discovered her I was

1249
00:52:38,329 --> 00:52:42,769
writing this book on Australian code

1250
00:52:40,219 --> 00:52:45,500
breakers and she wasn't really part of

1251
00:52:42,769 --> 00:52:48,199
the code breaking story she's sort of

1252
00:52:45,500 --> 00:52:49,509
tangential to that anyway there was so

1253
00:52:48,199 --> 00:52:50,828
much interest in that chapter

1254
00:52:49,509 --> 00:52:52,688
but we'll say that I think the

1255
00:52:50,829 --> 00:52:54,669
codebreakers say that she deserves her

1256
00:52:52,688 --> 00:52:56,288
own book yeah I mean she had all these

1257
00:52:54,668 --> 00:52:58,748
innovative technique techniques for

1258
00:52:56,289 --> 00:53:00,399
training people and well she used music

1259
00:52:58,748 --> 00:53:02,438
to teach people so she'd have the teddy

1260
00:53:00,398 --> 00:53:04,058
bears picnic playing so maybe you're

1261
00:53:02,438 --> 00:53:05,978
tapping the amour skis to the teddy

1262
00:53:04,059 --> 00:53:09,278
bears picnic and she had all these cool

1263
00:53:05,978 --> 00:53:10,838
funny rhymes that you have to teach you

1264
00:53:09,278 --> 00:53:14,380
and talk about some of those fries oh

1265
00:53:10,838 --> 00:53:15,938
yes sure it's actually fun meeting

1266
00:53:14,380 --> 00:53:17,108
people who trained with her and trying

1267
00:53:15,938 --> 00:53:20,009
to piece together I don't know if

1268
00:53:17,108 --> 00:53:22,989
there's a complete alphabet of mrs. neck

1269
00:53:20,009 --> 00:53:24,219
mnemonics but I like to think there is

1270
00:53:22,989 --> 00:53:26,369
I'm tracking at all the different

1271
00:53:24,219 --> 00:53:28,059
letters of the alphabet so for instance

1272
00:53:26,369 --> 00:53:30,269
in Morse code

1273
00:53:28,059 --> 00:53:34,630
which is basically just dots and dashes

1274
00:53:30,268 --> 00:53:37,448
the letter Q goes dah dah dah

1275
00:53:34,630 --> 00:53:39,278
it's a and so we got all these young

1276
00:53:37,449 --> 00:53:41,949
women and trying to learn that and so

1277
00:53:39,278 --> 00:53:44,438
she'd say it sounds like he comes the

1278
00:53:41,949 --> 00:53:49,869
bride so they instead of Q is here comes

1279
00:53:44,438 --> 00:53:52,118
the bride there's a letter v ah did ah

1280
00:53:49,869 --> 00:53:54,818
she said oh well that's music as well

1281
00:53:52,119 --> 00:53:57,579
that's just because V looks like the new

1282
00:53:54,818 --> 00:54:01,148
remi new miller glitter 4/5 that's

1283

00:53:57,579 --> 00:54:03,548
Beethoven's fifth Dada and say feel

1284
00:54:01,148 --> 00:54:07,659
anymore you're never gonna get to get ve

1285
00:54:03,548 --> 00:54:09,728
bean they'd open space where to be so

1286
00:54:07,659 --> 00:54:12,398
these are some of the things she did she

1287
00:54:09,728 --> 00:54:14,138
had a lot of interesting tricks for

1288
00:54:12,398 --> 00:54:16,778
teaching people and I think she's

1289
00:54:14,139 --> 00:54:19,269
actually really my Australia's great

1290
00:54:16,778 --> 00:54:21,880
teachers period you know real innovator

1291
00:54:19,268 --> 00:54:23,618
in terms of training in teaching what

1292
00:54:21,880 --> 00:54:25,419
else did she do you mentioned quite a

1293
00:54:23,619 --> 00:54:29,979
few other activities what did she do say

1294
00:54:25,418 --> 00:54:31,958
after the war during the war her signal

1295
00:54:29,978 --> 00:54:34,509
school just got bigger and bigger so you

1296
00:54:31,958 --> 00:54:36,368
know she trained these women and in the

1297
00:54:34,509 --> 00:54:39,338

Navy city s we'd like the women and then

1298

00:54:36,369 --> 00:54:40,460

the Air Force and then they realized

1299

00:54:39,338 --> 00:54:42,739

they didn't have anybody to train

1300

00:54:40,460 --> 00:54:44,869

men going into the signals units and so

1301

00:54:42,739 --> 00:54:47,059

forth so and and for the Air Force

1302

00:54:44,869 --> 00:54:49,608

so her women that she trapped her they

1303

00:54:47,059 --> 00:54:51,858

almost just work you know office workers

1304

00:54:49,608 --> 00:54:55,009

in Sydney these young women or even even

1305

00:54:51,858 --> 00:54:56,630

you know just late teens and early 20s

1306

00:54:55,010 --> 00:54:59,480

they were ended up training all the men

1307

00:54:56,630 --> 00:55:02,570

all that all that all the recruits for

1308

00:54:59,480 --> 00:55:04,849

the Australian Air Force the Navy the

1309

00:55:02,570 --> 00:55:08,390

house of 10,000 men they trained these

1310

00:55:04,849 --> 00:55:10,430

these women and then but then after the

1311

00:55:08,389 --> 00:55:11,989

war the whole thing went down and then

1312
00:55:10,429 --> 00:55:14,059
all these veterans started coming back

1313
00:55:11,989 --> 00:55:16,459
and they didn't have jobs so she was

1314
00:55:14,059 --> 00:55:19,369
training she started training some of

1315
00:55:16,460 --> 00:55:20,720
the men she trained before you know guys

1316
00:55:19,369 --> 00:55:23,320
who've learned all these skills in the

1317
00:55:20,719 --> 00:55:26,719
Air Force to become commercial pilots

1318
00:55:23,320 --> 00:55:28,130
and training them to become merchant

1319
00:55:26,719 --> 00:55:29,659
sailors and stuff like this because they

1320
00:55:28,130 --> 00:55:32,838
still needed to learn all of the skills

1321
00:55:29,659 --> 00:55:36,379
involved in in signals so she did that

1322
00:55:32,838 --> 00:55:37,608
until about 1950 - yeah so she did

1323
00:55:36,380 --> 00:55:39,619
different a number of years and then she

1324
00:55:37,608 --> 00:55:42,409
retired they used to be mixed some

1325
00:55:39,619 --> 00:55:44,720
people who knew her what were they roles

1326
00:55:42,409 --> 00:55:47,449
descriptions of her well it's funny like

1327
00:55:44,719 --> 00:55:49,250
I will okay so so there's a few things

1328
00:55:47,449 --> 00:55:53,179
that everybody seems to say she was

1329
00:55:49,250 --> 00:55:55,909
lovely she was amazing and she was very

1330
00:55:53,179 --> 00:55:58,338
very short term I don't know why they

1331
00:55:55,909 --> 00:56:02,659
always mention that so it's been good so

1332
00:55:58,338 --> 00:56:05,570
I'd only found four people who knew her

1333
00:56:02,659 --> 00:56:08,929
in person at various times you know a

1334
00:56:05,570 --> 00:56:10,730
one was a just relative and just

1335
00:56:08,929 --> 00:56:14,000
different people who actually met her in

1336
00:56:10,730 --> 00:56:15,710
some way I've actually discovered many

1337
00:56:14,000 --> 00:56:17,088
other people who knew her and were

1338
00:56:15,710 --> 00:56:19,280
trained by her and it's been just really

1339
00:56:17,088 --> 00:56:23,960
great meeting them and hearing hearing

1340

00:56:19,280 --> 00:56:26,359
the story about her well that's a really

1341
00:56:23,960 --> 00:56:28,550
impressive story if any of our listeners

1342
00:56:26,358 --> 00:56:29,269
want to get in contact with you how can

1343
00:56:28,550 --> 00:56:31,220
you be reached

1344
00:56:29,269 --> 00:56:33,079
oh by email I guess is the simplest

1345
00:56:31,219 --> 00:56:38,358
thing you David duck dia Gmail comments

1346
00:56:33,079 --> 00:56:40,909
div ID d u ft y no dots or anything at

1347
00:56:38,358 --> 00:56:42,179
gmail.com and as duf t why a lot of

1348
00:56:40,909 --> 00:56:46,519
people duck

1349
00:56:42,179 --> 00:56:48,299
is my name duck yeah so you can email me

1350
00:56:46,519 --> 00:56:50,759
about to hear from you if you know

1351
00:56:48,300 --> 00:56:52,650
anything about mrs. Mehta was you know

1352
00:56:50,760 --> 00:56:53,850
signals trading in the Second World War

1353
00:56:52,650 --> 00:56:55,740
or anything like that or if you've got

1354
00:56:53,849 --> 00:56:58,409

any amazing stories about code breaking

1355

00:56:55,739 --> 00:57:01,049

in the Second World War as well a lovely

1356

00:56:58,409 --> 00:57:02,579

performance I know there are well David

1357

00:57:01,050 --> 00:57:04,170

daddy thank you very much

1358

00:57:02,579 --> 00:57:16,989

Thanksgiving

1359

00:57:04,170 --> 00:57:16,989

[Music]

1360

00:57:22,429 --> 00:57:27,539

thank you for listening to the skeptic

1361

00:57:24,780 --> 00:57:30,210

zone next week even more scientists peed

1362

00:57:27,539 --> 00:57:32,789

meeting and Maynard chats to lots of

1363

00:57:30,210 --> 00:57:35,579

other scientists as well more scientists

1364

00:57:32,789 --> 00:57:37,259

than you can poke a test-tube at why

1365

00:57:35,579 --> 00:57:39,449

you'd want to do that I don't know and

1366

00:57:37,260 --> 00:57:41,820

speaking of more scientists then you can

1367

00:57:39,449 --> 00:57:44,549

poke a test-tube at you'll be meeting

1368

00:57:41,820 --> 00:57:47,609

lots of those people and all sorts of

1369
00:57:44,550 --> 00:57:49,470
skeptics and doctors at the Australian

1370
00:57:47,608 --> 00:57:51,750
skeptics National Convention skeptic on

1371
00:57:49,469 --> 00:57:53,368
coming up later in the all very soon we

1372
00:57:51,750 --> 00:57:56,010
keep saying later in the year but

1373
00:57:53,369 --> 00:57:57,570
actually it's very soon now and if you

1374
00:57:56,010 --> 00:57:59,910
haven't bought your tickets yet now's

1375
00:57:57,570 --> 00:58:01,619
the time to do it it helps with numbers

1376
00:57:59,909 --> 00:58:04,019
and not planning and organizing and all

1377
00:58:01,619 --> 00:58:06,960
sorts of things I went to the venue with

1378
00:58:04,019 --> 00:58:09,269
Alethea Dean just a few days ago

1379
00:58:06,960 --> 00:58:11,909
Alethea Maynard and I went there to make

1380
00:58:09,269 --> 00:58:14,369
a promotional video and it's superb the

1381
00:58:11,909 --> 00:58:16,379
concourse at Chatswood now I'm very

1382
00:58:14,369 --> 00:58:18,990
excited to tell you that coming up on

1383
00:58:16,380 --> 00:58:21,180
next week's show we have an interview

1384
00:58:18,989 --> 00:58:24,689
with Stephen Barrett the man behind

1385
00:58:21,179 --> 00:58:26,338
quack watch quack watch.org now you'll

1386
00:58:24,690 --> 00:58:27,869
hear promotions in fact on this week's

1387
00:58:26,338 --> 00:58:30,389
episode you heard the promotion for

1388
00:58:27,869 --> 00:58:33,000
quack watch I've been visiting the site

1389
00:58:30,389 --> 00:58:35,940
for years to find out information about

1390
00:58:33,000 --> 00:58:39,960
homeopathy chiropractic acupuncture and

1391
00:58:35,940 --> 00:58:41,760
on and on and on so I am delighted and

1392
00:58:39,960 --> 00:58:44,190
honored to bring you next week and

1393
00:58:41,760 --> 00:58:45,839
interview with Stephen Barrett thank you

1394
00:58:44,190 --> 00:58:48,088
to those people who contribute to the

1395
00:58:45,838 --> 00:58:50,009
sceptic zone via PayPal or patreon I'm

1396
00:58:48,088 --> 00:58:52,230
getting so much use out of the new

1397

00:58:50,010 --> 00:58:54,599
microphone the yellow tech eye XM and I

1398
00:58:52,230 --> 00:58:57,809
can only do that because of the generous

1399
00:58:54,599 --> 00:59:01,200
and kind contributions from skeptic zone

1400
00:58:57,809 --> 00:59:03,329
listeners and also just lately I am able

1401
00:59:01,199 --> 00:59:05,848
to help Maine out out with some new bits

1402
00:59:03,329 --> 00:59:08,759
and pieces and equipment and that's all

1403
00:59:05,849 --> 00:59:11,960
very much appreciated and I hope it

1404
00:59:08,760 --> 00:59:14,760
helps to bring you a better skeptic zone

1405
00:59:11,960 --> 00:59:16,530
but for this week this is Richard

1406
00:59:14,760 --> 00:59:19,099
Saunders signing off from Sydney

1407
00:59:16,530 --> 00:59:19,099
Australia

1408
00:59:21,289 --> 00:59:26,619
you've been listening to the skeptic

1409
00:59:23,719 --> 00:59:33,319
zone podcast please visit our website at

1410
00:59:26,619 --> 00:59:36,819
wwlp.com tax and to access the bat

1411
00:59:33,320 --> 00:59:39,470

catalog of episodes going back to 2008

1412
00:59:36,820 --> 00:59:42,769
you can follow the skeptic zone podcast

1413
00:59:39,469 --> 00:59:45,049
on twitter at skeptic zone visit our

1414
00:59:42,769 --> 00:59:45,940
facebook page or leave a review on

1415
00:59:45,050 --> 00:59:48,620
itunes

1416
00:59:45,940 --> 00:59:52,010
you can also support the skeptic zone

1417
00:59:48,619 --> 00:59:54,730
via patreon or paypal the skeptic zone

1418
00:59:52,010 --> 00:59:57,110
podcast is an independent production

1419
00:59:54,730 --> 00:59:59,240
reviews and opinions expressed on the

1420
00:59:57,110 --> 01:00:01,579
skeptic zone are not necessarily those

1421
00:59:59,239 --> 01:00:03,369
of Australian skeptics or any other

1422
01:00:01,579 --> 01:00:09,840
skeptical organization

1423
01:00:03,369 --> 01:00:09,839
[Music]

1424
01:00:13,519 --> 01:00:17,250
hello you people who listen after the

1425
01:00:15,960 --> 01:00:20,119
music we'll have to give you a special

1426
01:00:17,250 --> 01:00:27,570
name I think all right here we go again

1427
01:00:20,119 --> 01:00:30,480
predicted number from 1 to 1000 and use

1428
01:00:27,570 --> 01:00:32,190
your psychic powers skeptics and

1429
01:00:30,480 --> 01:00:32,579
listeners having psychic paths ok here

1430
01:00:32,190 --> 01:00:35,010
we go

1431
01:00:32,579 --> 01:00:38,670
have you predicted your number from 1 to

1432
01:00:35,010 --> 01:00:52,530
1000 the number is gonna rattle my 10

1433
01:00:38,670 --> 01:00:56,490
sided die here 308 308 all those people

1434
01:00:52,530 --> 01:00:57,750
who predicted 308 well done why don't

1435
01:00:56,489 --> 01:01:02,359
you run down to the kitchen and have

1436
01:00:57,750 --> 01:01:02,360
some caramel pudding