

**The Skeptic Zone Podcast  
Show 410 - 28 August 2016**



**Natalie Carrington**

1  
00:00:23,159 --> 00:00:09,080  
welcome to the skeptic zone the podcast

2  
00:00:29,019 --> 00:00:26,019  
hello and welcome to the skeptic zone

3  
00:00:31,839 --> 00:00:29,029  
episode number 410 for the twenty eighth

4  
00:00:33,270 --> 00:00:31,849  
of august 2016 Richard Saunders here

5  
00:00:36,280 --> 00:00:33,280  
with you from Sydney Australia

6  
00:00:39,069 --> 00:00:36,290  
surrounded today by the skeptics own

7  
00:00:41,650 --> 00:00:39,079  
cats Henrietta and Maude who aren't my

8  
00:00:43,950 --> 00:00:41,660  
feet I've come into a different part of

9  
00:00:46,090 --> 00:00:43,960  
the studio today to do the recording and

10  
00:00:47,680 --> 00:00:46,100  
right near their cat poster they're

11  
00:00:50,410 --> 00:00:47,690  
giving me funny looks at the moment

12  
00:00:52,840 --> 00:00:50,420  
Thank You Heidi Robinson for taking over

13  
00:00:55,479 --> 00:00:52,850

the skeptic zone last week I was a bit

14

00:00:58,209 --> 00:00:55,489

under the weather to say the least at

15

00:01:00,220 --> 00:00:58,219

least the day I can talk which is a good

16

00:01:02,470 --> 00:01:00,230

thing well depends who you talk to i

17

00:01:06,219 --> 00:01:02,480

suppose i'm not sure what hit me it was

18

00:01:08,499 --> 00:01:06,229

up no I know it's hit the hit me now

19

00:01:10,540 --> 00:01:08,509

it's a cat hello it's moored she's just

20

00:01:16,749 --> 00:01:10,550

jumped up to investigate the microphone

21

00:01:19,389 --> 00:01:16,759

hello I wish you could see this her

22

00:01:25,719 --> 00:01:19,399

little faces up and a poor why don't you

23

00:01:27,310 --> 00:01:25,729

sit down sit sit done it mm-hmm I don't

24

00:01:31,390 --> 00:01:27,320

know what hit me folks I think it was a

25

00:01:33,969 --> 00:01:31,400

chest infection but it was a sort of flu

26

00:01:37,870 --> 00:01:33,979

like I guess with the cold shivers and

27

00:01:41,740 --> 00:01:37,880

shakes and general feeling up money well

28

00:01:43,569 --> 00:01:41,750

yeah it's it's Henrietta now hello are

29

00:01:48,160 --> 00:01:43,579

you going to you sit there and you sit

30

00:01:50,219 --> 00:01:48,170

there anyway these two cats did keep me

31

00:01:54,550 --> 00:01:50,229

company through the week as I recovered

32

00:02:01,450 --> 00:01:54,560

more or less on the couch for about 48

33

00:02:05,200 --> 00:02:01,460

hours hello mm-hmm you do want me to do

34

00:02:07,060 --> 00:02:05,210

the show don't you anyway they did keep

35

00:02:09,130 --> 00:02:07,070

me company which is nice anyway coming

36

00:02:11,289 --> 00:02:09,140

up on this week's episode of the skeptic

37

00:02:12,910 --> 00:02:11,299

zone we're looking at a story that came

38

00:02:15,400 --> 00:02:12,920

to light in the last week about some

39

00:02:18,430 --> 00:02:15,410

brave parents who posted a video of

40

00:02:20,800 --> 00:02:18,440

their poor young daughter suffering the

41

00:02:22,360 --> 00:02:20,810

effects of whooping cough as a warning

42

00:02:25,890 --> 00:02:22,370

to other parents it was a very

43

00:02:29,680 --> 00:02:25,900

courageous thing for them to do and as

44

00:02:32,940 --> 00:02:29,690

we might predict the flying monkeys the

45

00:02:37,110 --> 00:02:32,950

anti-vaccination crowd

46

00:02:39,660 --> 00:02:37,120

came out of the woodwork to condemn

47

00:02:41,759 --> 00:02:39,670

these parents suggesting of course

48

00:02:43,170 --> 00:02:41,769

ridiculous things like it was really the

49

00:02:44,970 --> 00:02:43,180

vaccination that gave their daughter

50

00:02:47,130 --> 00:02:44,980

whooping cough and probably a lot worse

51  
00:02:51,390 --> 00:02:47,140  
and we're going to be reading the story

52  
00:02:53,759 --> 00:02:51,400  
of this report as it was covered at news

53  
00:02:57,660 --> 00:02:53,769  
comdata you with some audio from the

54  
00:03:00,180 --> 00:02:57,670  
channel 7 TV news following that it's

55  
00:03:01,920 --> 00:03:00,190  
Heidi Robertson the raw skeptic when

56  
00:03:04,380 --> 00:03:01,930  
she's not hosting the skeptic zone she's

57  
00:03:06,660 --> 00:03:04,390  
doing reports more reports from Brisbane

58  
00:03:08,309 --> 00:03:06,670  
skeptic camp this week she's speaking to

59  
00:03:12,500 --> 00:03:08,319  
Natalie Carrington a teacher an English

60  
00:03:17,059 --> 00:03:12,510  
teacher talking about or discussing how

61  
00:03:20,009 --> 00:03:17,069  
you can teach skepticism using language

62  
00:03:23,580 --> 00:03:20,019  
the language what what to look out for

63  
00:03:25,440 --> 00:03:23,590

what to hear for what to be wary of when

64

00:03:27,600 --> 00:03:25,450

it comes to the use of language in

65

00:03:28,910 --> 00:03:27,610

critical thinking especially when it

66

00:03:30,900 --> 00:03:28,920

comes to things like advertising

67

00:03:33,479 --> 00:03:30,910

following that it's a report from the

68

00:03:35,789 --> 00:03:33,489

Australian skeptics from the Australian

69

00:03:38,400 --> 00:03:35,799

skeptics website skeptics comdata you

70

00:03:40,110 --> 00:03:38,410

about our concerns and when I say owl

71

00:03:43,199 --> 00:03:40,120

because yes I'm also a member of

72

00:03:46,800 --> 00:03:43,209

throwing skeptics with chiropractors

73

00:03:48,900 --> 00:03:46,810

Chiropractic and a letter written to the

74

00:03:51,599 --> 00:03:48,910

chiropractic Board of Australia by our

75

00:03:54,240 --> 00:03:51,609

president and skeptics own reporter Iran

76

00:03:56,129 --> 00:03:54,250

sir give and their response that's

77

00:03:57,750 --> 00:03:56,139

coming up a bit later then to round off

78

00:04:00,569 --> 00:03:57,760

the show more from a night at the

79

00:04:01,740 --> 00:04:00,579

Australian Museum where he and I were

80

00:04:05,490 --> 00:04:01,750

performing the mystery investigators

81

00:04:09,500 --> 00:04:05,500

show a few weeks ago and in between

82

00:04:12,449 --> 00:04:09,510

shows we got to look around the other

83

00:04:15,330 --> 00:04:12,459

exhibitions and stands and booths and

84

00:04:16,830 --> 00:04:15,340

outreach by various organization this

85

00:04:21,240 --> 00:04:16,840

week Maynard's going to be looking at

86

00:04:22,500 --> 00:04:21,250

crime scene investigation and science it

87

00:04:24,779 --> 00:04:22,510

was really interesting really

88

00:04:27,930 --> 00:04:24,789

interesting stuff and also he gets the

89

00:04:29,909 --> 00:04:27,940

chat to some people who came along to

90

00:04:33,120 --> 00:04:29,919

see the mystery investigators show and

91

00:04:35,670 --> 00:04:33,130

to mitigate any possible accusations of

92

00:04:37,260 --> 00:04:35,680

conflict of interest or a nip 'it is

93

00:04:39,600 --> 00:04:37,270

amor anything like that the people may

94

00:04:43,060 --> 00:04:39,610

not interviews well they happen to be

95

00:04:50,510 --> 00:04:47,210

it's Henrietta once again hello are you

96

00:04:51,860 --> 00:04:50,520

going to hop down off the thank you well

97

00:04:53,240 --> 00:04:51,870

I don't know how I'm going to continue

98

00:04:55,249 --> 00:04:53,250

on doing the rest of the show with you

99

00:04:59,990 --> 00:04:55,259

about I better take you and your sister

100

00:05:03,830 --> 00:05:00,000

moored to the laundry where your food is

101  
00:05:06,170 --> 00:05:03,840  
would you like some kibbles yeah okay

102  
00:05:29,759 --> 00:05:06,180  
well I'm feeding the skeptics own cats

103  
00:05:37,359 --> 00:05:33,869  
from the website of news.com today you

104  
00:05:41,289 --> 00:05:37,369  
written by Vanessa Brown 25th of August

105  
00:05:44,969 --> 00:05:41,299  
2016 mother who posted heartbreaking

106  
00:05:47,919 --> 00:05:44,979  
video of her baby choking is bullied by

107  
00:05:50,619 --> 00:05:47,929  
anti-vaxxers online the sydney mother

108  
00:05:53,589 --> 00:05:50,629  
who posted a heartbreaking a video of

109  
00:05:56,319 --> 00:05:53,599  
her five-week-old baby choking for air

110  
00:05:59,819 --> 00:05:56,329  
after catching whooping cough has been

111  
00:06:02,559 --> 00:05:59,829  
bullied online by trolls who say quote

112  
00:06:06,129 --> 00:06:02,569  
vaccination is what caused her baby to

113  
00:06:08,889 --> 00:06:06,139

get sick end quote on Monday Sara posted

114

00:06:11,319 --> 00:06:08,899

the video of her daughter Heidi gasping

115

00:06:14,039 --> 00:06:11,329

for breath in an attempt to quote

116

00:06:17,019 --> 00:06:14,049

educate more people on the importance of

117

00:06:19,049 --> 00:06:17,029

vaccinations and quote now what I'll do

118

00:06:23,739 --> 00:06:19,059

is I'll play the audio clip from the

119

00:06:26,289 --> 00:06:23,749

seven television news on the story every

120

00:06:28,809 --> 00:06:26,299

couple of hours tiny Heidi T stops

121

00:06:32,799 --> 00:06:28,819

breathing turns blue and has to be

122

00:06:34,839 --> 00:06:32,809

resuscitated it's unnerving vision but

123

00:06:36,729 --> 00:06:34,849

Heidi's parents want every Australian

124

00:06:38,949 --> 00:06:36,739

especially those who question the

125

00:06:41,139 --> 00:06:38,959

benefit of vaccinations to watch their

126

00:06:44,259 --> 00:06:41,149

daughter's life and death struggle are

127

00:06:47,439 --> 00:06:44,269

you thinking to yourself she to pull

128

00:06:49,719 --> 00:06:47,449

through yeah you read a lot of scary

129

00:06:51,639 --> 00:06:49,729

things online about whether vaccinations

130

00:06:53,469 --> 00:06:51,649

are or are not safe but you have your

131

00:06:55,119 --> 00:06:53,479

child in the hospital stop breathing and

132

00:06:57,369 --> 00:06:55,129

you will change your view in about 10

133

00:06:59,439 --> 00:06:57,379

seconds Heidi who's too young to be

134

00:07:01,449 --> 00:06:59,449

vaccinated contracted whooping cough

135

00:07:03,699 --> 00:07:01,459

after her big brother was infected at

136

00:07:06,909 --> 00:07:03,709

daycare because her coughs were almost

137

00:07:08,139 --> 00:07:06,919

silent it was difficult to diagnose for

138

00:07:10,359 --> 00:07:08,149

those people who don't believe in

139

00:07:12,009 --> 00:07:10,369

vaccination is the proof there's been a

140

00:07:14,349 --> 00:07:12,019

major resurgence of whooping cough in

141

00:07:16,329 --> 00:07:14,359

Australia in recent years due in no

142

00:07:18,579 --> 00:07:16,339

small path to the five percent of

143

00:07:21,219 --> 00:07:18,589

parents who still don't get their babies

144

00:07:25,979 --> 00:07:21,229

or themselves vaccinated it's putting

145

00:07:27,809 --> 00:07:25,989

little tiny 2.6 kilo babies at risk I

146

00:07:30,129 --> 00:07:27,819

wouldn't want that on my conscience

147

00:07:33,039 --> 00:07:30,139

immunization was invented 200 years ago

148

00:07:35,949 --> 00:07:33,049

it is completely safe and prevents

149

00:07:38,049 --> 00:07:35,959

children dying from whooping cough every

150

00:07:40,480 --> 00:07:38,059

time Heidi stops breathing she's in

151

00:07:43,390 --> 00:07:40,490

danger but thankfully dr.

152

00:07:46,870 --> 00:07:43,400

is now say her condition is stable Glen

153

00:07:50,020 --> 00:07:46,880

Conley 7 News and thank you to the Seven

154

00:07:53,529 --> 00:07:50,030

Network for that audio we read on quote

155

00:07:56,200 --> 00:07:53,539

this video may distress some people but

156

00:07:58,659 --> 00:07:56,210

I'm sharing it to show just how scary

157

00:08:00,249 --> 00:07:58,669

and dangerous whooping cough is to

158

00:08:02,740 --> 00:08:00,259

babies who are too young to be

159

00:08:05,650 --> 00:08:02,750

vaccinated in quote Sarah wrote on the

160

00:08:08,230 --> 00:08:05,660

original post quote this is my five week

161

00:08:11,710 --> 00:08:08,240

old baby during an episode where she

162

00:08:14,640 --> 00:08:11,720

chokes and stops breathing babies rely

163

00:08:17,230 --> 00:08:14,650

on herd immunity to keep them safe and

164

00:08:19,360 --> 00:08:17,240

unfortunately we cannot achieve that

165

00:08:21,969 --> 00:08:19,370

without high vaccination rates unquote

166

00:08:24,610 --> 00:08:21,979

sarah said that her son had contracted

167

00:08:27,460 --> 00:08:24,620

whooping cough after an outbreak at his

168

00:08:30,370 --> 00:08:27,470

daycare center he was tested positive

169

00:08:33,219 --> 00:08:30,380

when Heidi was just ten days old and too

170

00:08:35,649 --> 00:08:33,229

young to receive the immunization while

171

00:08:37,560 --> 00:08:35,659

most people praised the mother for

172

00:08:39,519 --> 00:08:37,570

sharing the distressing footage and

173

00:08:42,579 --> 00:08:39,529

educating those who are against

174

00:08:45,730 --> 00:08:42,589

vaccination others weren't so supportive

175

00:08:47,639 --> 00:08:45,740

quote I've had a few suggest that I gave

176

00:08:50,230 --> 00:08:47,649

my daughter whooping cough via

177

00:08:52,750 --> 00:08:50,240

vaccination which is not the case at all

178

00:08:55,690 --> 00:08:52,760

in quote she told news com delay you

179

00:08:57,990 --> 00:08:55,700

quote I'm not bothered by it we've done

180

00:09:00,760 --> 00:08:58,000

all that we can to get her well and

181

00:09:03,910 --> 00:09:00,770

protect her end quote some of the

182

00:09:05,980 --> 00:09:03,920

messages Sarah received suggested she

183

00:09:08,769 --> 00:09:05,990

was to blame for her daughter falling

184

00:09:10,720 --> 00:09:08,779

sick quote vaccination is what caused

185

00:09:14,019 --> 00:09:10,730

your baby to get sick and quote one

186

00:09:16,540 --> 00:09:14,029

Facebook user messaged Sarah with other

187

00:09:18,730 --> 00:09:16,550

messages saying quote it has been known

188

00:09:22,600 --> 00:09:18,740

for years now that those vaccinated with

189

00:09:24,400 --> 00:09:22,610

the dtap vaccine still catch carri and

190

00:09:27,610 --> 00:09:24,410

spread whooping cough they don't just

191

00:09:30,940 --> 00:09:27,620

get symptoms and quote they are near

192

00:09:34,000 --> 00:09:30,950

constant carriers now due to the dtap

193

00:09:36,250 --> 00:09:34,010

vaccinations from 1996 Australia has had

194

00:09:39,579 --> 00:09:36,260

a non-stop epidemic for ten years now

195

00:09:43,960 --> 00:09:39,589

and quote please get educated on the

196

00:09:47,829 --> 00:09:43,970

scientific facts the old dtp worked the

197

00:09:50,650 --> 00:09:47,839

new dtap doesn't work in quote another

198

00:09:51,879 --> 00:09:50,660

Facebook user suggested that if she had

199

00:09:54,400 --> 00:09:51,889

her time again

200

00:09:57,340 --> 00:09:54,410

she never would have vaccinated her own

201  
00:09:59,979 --> 00:09:57,350  
children quote I have three kids all of

202  
00:10:02,559 --> 00:09:59,989  
which are vaccinated and if I knew then

203  
00:10:05,289 --> 00:10:02,569  
what I know now I would have never have

204  
00:10:08,169 --> 00:10:05,299  
done it in quote and quote I'll never

205  
00:10:10,210 --> 00:10:08,179  
understand how you can vaccinate and I

206  
00:10:11,789 --> 00:10:10,220  
will never understand how you can get

207  
00:10:15,239 --> 00:10:11,799  
vaccinated while you are pregnant

208  
00:10:18,939 --> 00:10:15,249  
educate before you vaccinate never ever

209  
00:10:21,249 --> 00:10:18,949  
vaccinate end quote another said the

210  
00:10:23,590 --> 00:10:21,259  
video which went viral shows a

211  
00:10:25,179 --> 00:10:23,600  
struggling Heidi trying to breathe while

212  
00:10:28,389 --> 00:10:25,189  
surrounded by her family and medical

213  
00:10:30,849 --> 00:10:28,399

staff trying to assist Sara believes her

214

00:10:33,189 --> 00:10:30,859

daughter would have died if they didn't

215

00:10:35,889 --> 00:10:33,199

get her to hospital Sarah's husband

216

00:10:37,960 --> 00:10:35,899

supported his wife's video post saying

217

00:10:40,210 --> 00:10:37,970

quote for those people who don't believe

218

00:10:43,569 --> 00:10:40,220

in vaccination he is the proof not

219

00:10:45,849 --> 00:10:43,579

vaccinating is putting tiny 2.6 kilo

220

00:10:48,249 --> 00:10:45,859

babies at risk I wouldn't want that on

221

00:10:50,470 --> 00:10:48,259

my conscience end quote despite the

222

00:10:53,049 --> 00:10:50,480

small amount of protest Sarah's video

223

00:10:55,329 --> 00:10:53,059

created she just wants to see her

224

00:10:57,699 --> 00:10:55,339

daughter get well quote she's doing

225

00:10:59,710 --> 00:10:57,709

really well today and we are super happy

226  
00:11:02,379 --> 00:10:59,720  
with her progress in quote she told news

227  
00:11:04,659 --> 00:11:02,389  
com delay you quote we were hoping

228  
00:11:07,449 --> 00:11:04,669  
hoping hoping we can go home this

229  
00:11:10,569 --> 00:11:07,459  
weekend but we don't really know yet in

230  
00:11:14,289 --> 00:11:10,579  
quote and that story was reported by

231  
00:11:17,530 --> 00:11:14,299  
Vanessa Brown and this certainly is no

232  
00:11:20,859 --> 00:11:17,540  
surprise to members of the skeptic zone

233  
00:11:24,519 --> 00:11:20,869  
audience I'm sure who would well realize

234  
00:11:26,769 --> 00:11:24,529  
once a concerned parent or parents posts

235  
00:11:29,100 --> 00:11:26,779  
videos of their six children online to

236  
00:11:31,359 --> 00:11:29,110  
warn others of the dangers of her

237  
00:11:33,549 --> 00:11:31,369  
infectious diseases like whooping coughs

238  
00:11:36,609 --> 00:11:33,559

the flying monkeys as we call them the

239

00:11:38,949 --> 00:11:36,619

anti-vaccination crowd will come out of

240

00:11:43,150 --> 00:11:38,959

their shadows out from under the rocks

241

00:11:44,859 --> 00:11:43,160

and condemn the parents and blame the

242

00:11:47,739 --> 00:11:44,869

parents and make up all sorts of

243

00:11:49,569 --> 00:11:47,749

mischief there but congratulations to

244

00:12:06,239 --> 00:11:49,579

those parents brave enough to put that

245

00:12:11,019 --> 00:12:08,769

we've just opened akwa ecology

246

00:12:14,619 --> 00:12:11,029

exhibition at Edinburgh Smew ziam of

247

00:12:17,019 --> 00:12:14,629

childhood you can shrink in size see the

248

00:12:20,139 --> 00:12:17,029

amazing cylinders two squares illusion

249

00:12:25,179 --> 00:12:20,149

live watch all your favorite qua College

250

00:12:26,889 --> 00:12:25,189

eclipse create your own illusions we

251

00:12:29,679 --> 00:12:26,899

never tasted by magician David

252

00:12:31,569 --> 00:12:29,689

Copperfield and lots more we can take

253

00:12:33,939 --> 00:12:31,579

the exhibition anywhere so if your

254

00:12:36,489 --> 00:12:33,949

Museum science center shopping mall or

255

00:12:52,989 --> 00:12:36,499

school get in touch for more information

256

00:13:04,560 --> 00:12:52,999

visit [www.a um](http://www.aum.it) it's the raw skeptic

257

00:13:12,790 --> 00:13:08,770

okay i'm here with Natalie Carrington

258

00:13:15,280 --> 00:13:12,800

and a few very loud birds and the tree

259

00:13:17,530 --> 00:13:15,290

above us Natalie's just given a very

260

00:13:20,290 --> 00:13:17,540

interesting talk natalie is an English

261

00:13:23,350 --> 00:13:20,300

teacher can you tell us what your talk

262

00:13:25,480 --> 00:13:23,360

was about my talk was about teaching

263

00:13:27,160 --> 00:13:25,490

skepticism through a deconstruction and

264

00:13:29,800 --> 00:13:27,170

analysis of the language used in

265

00:13:32,590 --> 00:13:29,810

advertising and media and in particular

266

00:13:34,510 --> 00:13:32,600

you are focusing on the importance of

267

00:13:37,300 --> 00:13:34,520

teaching these skills and critical

268

00:13:41,260 --> 00:13:37,310

thinking skills to students yeah that's

269

00:13:44,020 --> 00:13:41,270

correct yeah so tell us some of the the

270

00:13:47,290 --> 00:13:44,030

techniques that you do teach your

271

00:13:49,090 --> 00:13:47,300

students in order to tell the good

272

00:13:52,680 --> 00:13:49,100

information from the not-so-good

273

00:13:55,480 --> 00:13:52,690

information we start by having a look at

274

00:13:57,780 --> 00:13:55,490

sort of the idea of widely accepted

275

00:13:59,650 --> 00:13:57,790

information versus accurate information

276

00:14:01,330 --> 00:13:59,660

just because something is why the

277

00:14:03,550 --> 00:14:01,340

acceptor doesn't make it true of course

278

00:14:05,380 --> 00:14:03,560

we have a look at the way that language

279

00:14:07,930 --> 00:14:05,390

is used so looking at emotional appeal

280

00:14:10,390 --> 00:14:07,940

weasel words goodness me there are so

281

00:14:12,340 --> 00:14:10,400

many to choose from the use of like the

282

00:14:15,100 --> 00:14:12,350

bandwagon fallacy argument from

283

00:14:17,230 --> 00:14:15,110

authority those kinds of things what

284

00:14:19,480 --> 00:14:17,240

what age do you think we should start

285

00:14:23,410 --> 00:14:19,490

teaching our kids about these sorts of

286

00:14:26,170 --> 00:14:23,420

things is any any age an optimal age to

287

00:14:27,820 --> 00:14:26,180

start teaching things well I'm not an

288

00:14:30,550 --> 00:14:27,830

expert in early childhood or anything

289

00:14:32,020 --> 00:14:30,560

but my understanding would be as soon as

290

00:14:34,360 --> 00:14:32,030

a child can understand language they can

291

00:14:36,010 --> 00:14:34,370

well we see them starting to try and

292

00:14:38,740 --> 00:14:36,020

manipulate others using language lying

293

00:14:43,410 --> 00:14:38,750

and what have you so the earlier the

294

00:14:46,960 --> 00:14:43,420

better yeah this is one of my one of my

295

00:14:50,230 --> 00:14:46,970

passions I guess is is to get these

296

00:14:53,950 --> 00:14:50,240

critical thinking skills into schools

297

00:14:55,330 --> 00:14:53,960

because the way I see it I don't know if

298

00:14:58,360 --> 00:14:55,340

you agree or not but there's it's

299

00:15:02,050 --> 00:14:58,370

probably the only way that we are going

300

00:15:05,290 --> 00:15:02,060

to have a generation in the future of

301

00:15:07,150 --> 00:15:05,300

people that that don't fall for the

302

00:15:09,120 --> 00:15:07,160

pseudoscience or don't propagate the

303

00:15:10,470 --> 00:15:09,130

pseudoscience what do you think

304

00:15:13,320 --> 00:15:10,480

well I definitely agree with that

305

00:15:15,420 --> 00:15:13,330

education is one of the most potent

306

00:15:18,420 --> 00:15:15,430

tools we have at our disposal to try and

307

00:15:20,880 --> 00:15:18,430

combat woo and suicides alright so what

308

00:15:23,610 --> 00:15:20,890

what are some of the emotional appeals

309

00:15:26,430 --> 00:15:23,620

you mentioned desires and fears that

310

00:15:29,610 --> 00:15:26,440

that he use a lot in advertising can you

311

00:15:31,740 --> 00:15:29,620

give us an example of of an emotional

312

00:15:33,600 --> 00:15:31,750

appeal that you see in advertising a lot

313

00:15:35,940 --> 00:15:33,610

well particularly in political

314

00:15:38,190 --> 00:15:35,950

advertising we have the the emotional

315

00:15:40,290 --> 00:15:38,200

appeal of fear of what happens if the

316

00:15:43,200 --> 00:15:40,300

other team gets voted in both political

317

00:15:45,330 --> 00:15:43,210

parties were using it rampantly during

318

00:15:50,310 --> 00:15:45,340

their election campaigns in the last few

319

00:15:53,610 --> 00:15:50,320

weeks and it's it's quite a quite a

320

00:15:57,690 --> 00:15:53,620

profound tactic playing on the fear of

321

00:16:00,420 --> 00:15:57,700

of whichever group is watching the ad

322

00:16:02,220 --> 00:16:00,430

for what happens if labor gets in then

323

00:16:03,750 --> 00:16:02,230

then small businesses will go under what

324

00:16:06,060 --> 00:16:03,760

happens if you liberals that get in then

325

00:16:09,300 --> 00:16:06,070

poor people will starve you also talked

326

00:16:11,280 --> 00:16:09,310

a little bit about weasel words where do

327

00:16:13,130 --> 00:16:11,290

you see weezer words being used most

328

00:16:15,870 --> 00:16:13,140

often and what kind of ways are words

329

00:16:17,700 --> 00:16:15,880

I'd say it's most prevalent in in

330

00:16:19,920 --> 00:16:17,710

political advertising having a look at

331

00:16:21,840 --> 00:16:19,930

you know that the fact that we the words

332

00:16:23,130 --> 00:16:21,850

he used to avoid making outright

333

00:16:25,230 --> 00:16:23,140

statements so we see it a lot in

334

00:16:28,350 --> 00:16:25,240

political promises you know let's let's

335

00:16:31,890 --> 00:16:28,360

put 350 million year of pounds a week

336

00:16:34,200 --> 00:16:31,900

into the NHS says nigel Farage and then

337

00:16:35,520 --> 00:16:34,210

he reneged on that because it wasn't

338

00:16:36,960 --> 00:16:35,530

actually a promise it was a suggestion

339

00:16:38,700 --> 00:16:36,970

because the use of the world legs that's

340

00:16:42,570 --> 00:16:38,710

the example that I used if I talk but

341

00:16:47,340 --> 00:16:42,580

there are many others yeah I say it a

342

00:16:49,620 --> 00:16:47,350

lot in in the health health profession

343

00:16:52,230 --> 00:16:49,630

especially alternative medicine like

344

00:16:53,790 --> 00:16:52,240

naturopaths and homeopaths and I think

345

00:16:56,190 --> 00:16:53,800

one of the audience members also note

346

00:16:59,100 --> 00:16:56,200

that point that they use weasel words

347

00:17:01,980 --> 00:16:59,110

like this male help with this condition

348

00:17:03,870 --> 00:17:01,990

may help with that condition is that

349

00:17:06,240 --> 00:17:03,880

your experience too if you come across

350

00:17:07,800 --> 00:17:06,250

that I have seen that a lot and I think

351

00:17:09,840 --> 00:17:07,810

the reason they do it is because it

352

00:17:11,280 --> 00:17:09,850

basically protects them against the

353

00:17:13,530 --> 00:17:11,290

liability if they make an outright claim

354

00:17:15,090 --> 00:17:13,540

this will cure your cancer then when it

355

00:17:17,130 --> 00:17:15,100

doesn't cure your cancer people can

356

00:17:19,020 --> 00:17:17,140

bring suits against the person who is

357

00:17:19,620 --> 00:17:19,030

propagating that claim if they only use

358

00:17:22,350 --> 00:17:19,630

really

359

00:17:24,660 --> 00:17:22,360

the ambiguous terms like may or might or

360

00:17:27,059 --> 00:17:24,670

could then you know that the lower

361

00:17:28,710 --> 00:17:27,069

modality language lends itself to not

362

00:17:31,200 --> 00:17:28,720

having litigation circuit boards against

363

00:17:32,880 --> 00:17:31,210

them for false advertising and hence the

364

00:17:35,400 --> 00:17:32,890

term weasel words because it is very

365

00:17:38,040 --> 00:17:35,410

weaselly type behavior isn't it it is

366

00:17:41,250 --> 00:17:38,050

indeed well thank you very much Natalie

367

00:17:44,400 --> 00:17:41,260

for joining us and is this your first

368

00:17:46,560 --> 00:17:44,410

skeptic app this year it's the third 1

369

00:17:48,540 --> 00:17:46,570

i've been to as an attendant first time

370

00:17:51,870 --> 00:17:48,550

I've spoken at one well it was an

371

00:17:53,580 --> 00:17:51,880

excellent talk and if people want to get

372

00:17:56,310 --> 00:17:53,590

in touch with you or find out more about

373

00:17:57,750 --> 00:17:56,320

you where can they go I am on fed skill

374

00:18:01,320 --> 00:17:57,760

can I am on Twitter but I'm not very

375

00:18:03,120 --> 00:18:01,330

active on either well maybe maybe

376

00:18:05,460 --> 00:18:03,130

listeners will catch up with you at some

377

00:18:07,140 --> 00:18:05,470

skeptic events in the future thanks

378

00:18:26,280 --> 00:18:07,150

again for joining us you're most welcome

379

00:18:28,620 --> 00:18:26,290

thank you sigh con las vegas no it's not

380

00:18:30,870 --> 00:18:28,630

an illusion sigh con is coming to vegas

381

00:18:32,820 --> 00:18:30,880

and you're not just hearing things for

382

00:18:35,040 --> 00:18:32,830

too long skeptics have been wandering

383

00:18:38,460 --> 00:18:35,050

the desert parched and aimless wandering

384

00:18:40,530 --> 00:18:38,470

when oh when will they find an oasis but

385

00:18:42,120 --> 00:18:40,540

just on the horizon hope beckons at last

386

00:18:43,920 --> 00:18:42,130

a chance for critical thinkers from

387

00:18:45,870 --> 00:18:43,930

around the world to celebrate with the

388

00:18:47,870 --> 00:18:45,880

brightest minds and biggest

389

00:18:51,540 --> 00:18:47,880

personalities and science and skepticism

390

00:18:57,330 --> 00:18:51,550

it's no Mirage it's psych on 2016 and

391

00:19:00,000 --> 00:18:57,340

this time it's in Vegas October the 27th

392

00:19:01,980 --> 00:19:00,010

to the 30th come to the Excalibur Hotel

393

00:19:03,420 --> 00:19:01,990

and Casino in Las Vegas where brilliant

394

00:19:06,870 --> 00:19:03,430

speakers will make the City of Light

395

00:19:09,030 --> 00:19:06,880

truly shine with skeptic stars like

396

00:19:11,370 --> 00:19:09,040

evolutionary biologist Richard Dawkins

397

00:19:14,250 --> 00:19:11,380

science education champion Eugenie Scott

398

00:19:15,130 --> 00:19:14,260

30 astronomer Jill tarter and many more

399

00:19:18,370 --> 00:19:15,140

to be announced

400

00:19:22,780 --> 00:19:18,380

and yes James the amazing Randi will be

401  
00:19:25,390 --> 00:19:22,790  
there to Saigon 2016 is a production of

402  
00:19:27,280 --> 00:19:25,400  
the committee for skeptical inquiry the

403  
00:19:29,770 --> 00:19:27,290  
people who bring you the skeptical

404  
00:19:32,560 --> 00:19:29,780  
Inquirer magazine the group that began

405  
00:19:34,750 --> 00:19:32,570  
organized skepticism a generation ago

406  
00:19:37,750 --> 00:19:34,760  
and what better location for a

407  
00:19:40,780 --> 00:19:37,760  
conference of skeptics than a city full

408  
00:19:43,060 --> 00:19:40,790  
of illusions don't wait unlike claims of

409  
00:19:45,130 --> 00:19:43,070  
celebrity psychics conspiracy theorists

410  
00:19:47,770 --> 00:19:45,140  
and ultimate hucksters this is no

411  
00:19:54,250 --> 00:19:47,780  
illusion psyche on is real register now

412  
00:20:13,620 --> 00:19:54,260  
at wwc conference org at CSI conference

413  
00:20:19,180 --> 00:20:15,760

from the website of the cerulean

414

00:20:22,950 --> 00:20:19,190

skeptics skeptics calm today you by Tim

415

00:20:27,760 --> 00:20:22,960

mendham and her answer give dated august

416

00:20:30,490 --> 00:20:27,770

twenty-third 2016 Cairo board responds

417

00:20:32,620 --> 00:20:30,500

to skeptics concerns following the

418

00:20:35,410 --> 00:20:32,630

revelation of chiropractor lan

419

00:20:38,380 --> 00:20:35,420

rosboroughs cracking of an infant's

420

00:20:39,850 --> 00:20:38,390

spine on YouTube Australian skeptics and

421

00:20:41,880 --> 00:20:39,860

many members of the public and

422

00:20:44,500 --> 00:20:41,890

professionals expressed their outrage

423

00:20:48,490 --> 00:20:44,510

the Australian health practitioners

424

00:20:51,220 --> 00:20:48,500

regulatory agency ahpra and the

425

00:20:54,550 --> 00:20:51,230

chiropractic board of Australia cba took

426  
00:20:57,280 --> 00:20:54,560  
action and limited prosperous areas of

427  
00:20:59,800 --> 00:20:57,290  
activity but that wasn't enough there

428  
00:21:02,710 --> 00:20:59,810  
are still many chiropractors promoting

429  
00:21:05,260 --> 00:21:02,720  
and presumably performing the same

430  
00:21:08,680 --> 00:21:05,270  
practices as Ross Perot but with little

431  
00:21:12,460 --> 00:21:08,690  
if any reprimand we therefore wrote to

432  
00:21:15,760 --> 00:21:12,470  
the ahpra and the CBA to express our

433  
00:21:17,650 --> 00:21:15,770  
concerns of this lack of consistency the

434  
00:21:20,620 --> 00:21:17,660  
in regulating chiropractors who act

435  
00:21:23,830 --> 00:21:20,630  
outside the rules and regulations of the

436  
00:21:25,990 --> 00:21:23,840  
industry following is the correspondence

437  
00:21:30,850 --> 00:21:26,000  
note that we initially wrote to the

438  
00:21:32,920 --> 00:21:30,860

ahpra and the CBA on jun 17 2016 their

439

00:21:36,310 --> 00:21:32,930

response was dated June twenty-eighth

440

00:21:39,130 --> 00:21:36,320

but based on the postmark not posted

441

00:21:41,100 --> 00:21:39,140

until August sixteenth as read by the

442

00:21:46,180 --> 00:21:41,110

President of Australian skeptics Inc

443

00:21:49,210 --> 00:21:46,190

Australian skeptics Inc letter dear dr.

444

00:21:51,100 --> 00:21:49,220

menter Australian skeptics along with

445

00:21:53,320 --> 00:21:51,110

many other individuals and organizations

446

00:21:54,910 --> 00:21:53,330

as for a long time had grave concern

447

00:21:58,450 --> 00:21:54,920

over chiropractic practice and the

448

00:22:00,490 --> 00:21:58,460

management of the profession in 2013 we

449

00:22:03,010 --> 00:22:00,500

awarded our bent spoon award to both the

450

00:22:04,870 --> 00:22:03,020

chiropractic Board of Australia CBA and

451  
00:22:07,990 --> 00:22:04,880  
the chiropractor's Association of

452  
00:22:10,240 --> 00:22:08,000  
Australia CAA for blatantly ignoring the

453  
00:22:11,800 --> 00:22:10,250  
restrictions set by both groups on what

454  
00:22:13,720 --> 00:22:11,810  
the members of the profession could

455  
00:22:16,570 --> 00:22:13,730  
promote in terms of non evidence-based

456  
00:22:18,280 --> 00:22:16,580  
treatments this was not just the case of

457  
00:22:21,100 --> 00:22:18,290  
focusing on rogue elements within the

458  
00:22:23,170 --> 00:22:21,110  
industry members of the CIA's on board

459  
00:22:26,350 --> 00:22:23,180  
were ignoring their organizations on

460  
00:22:28,000 --> 00:22:26,360  
instructions more recently we have

461  
00:22:29,980 --> 00:22:28,010  
seen evidence of widespread use of

462  
00:22:33,250 --> 00:22:29,990  
disputed debunked and totally

463  
00:22:35,190 --> 00:22:33,260

unsubstantiated evidence for a range of

464

00:22:38,110 --> 00:22:35,200

chiropractic practices and methodologies

465

00:22:40,540 --> 00:22:38,120

these include many instances where

466

00:22:42,040 --> 00:22:40,550

chiropractors are claiming treatment for

467

00:22:44,260 --> 00:22:42,050

a wide range of conditions that would

468

00:22:46,780 --> 00:22:44,270

have nothing to do with a spine and or

469

00:22:49,050 --> 00:22:46,790

nervous system resort to the totally

470

00:22:51,220 --> 00:22:49,060

unproven concept of subluxation and

471

00:22:53,590 --> 00:22:51,230

chiropractors blatantly ignoring the

472

00:22:55,180 --> 00:22:53,600

rulings of the cba on use of non

473

00:22:58,120 --> 00:22:55,190

evidence-based claims in their

474

00:23:00,550 --> 00:22:58,130

advertising and promotion now we have

475

00:23:02,080 --> 00:23:00,560

the case of carp actor Ian Roseboro who

476

00:23:04,360 --> 00:23:02,090

has achieved recent notoriety for a

477

00:23:06,640 --> 00:23:04,370

video posted on YouTube where he cracks

478

00:23:09,820 --> 00:23:06,650

the spine of a four day old premature

479

00:23:11,560 --> 00:23:09,830

baby Roseboro has been rightly sanctions

480

00:23:14,170 --> 00:23:11,570

for his actions and limitations imposed

481

00:23:16,900 --> 00:23:14,180

upon his activities Australian skeptics

482

00:23:18,280 --> 00:23:16,910

applaud this action but the situation

483

00:23:20,320 --> 00:23:18,290

seems to be that rosboroughs major

484

00:23:22,390 --> 00:23:20,330

failing was in posting the video of his

485

00:23:24,010 --> 00:23:22,400

performing treatments the same

486

00:23:26,770 --> 00:23:24,020

treatments that many other crab actors

487

00:23:28,420 --> 00:23:26,780

also perform these are the possibly

488

00:23:30,580 --> 00:23:28,430

numbers in the hundreds and acclaiming

489

00:23:33,070 --> 00:23:30,590

at the very least if not performing

490

00:23:35,980 --> 00:23:33,080

treatments on neonates and infants that

491

00:23:37,960 --> 00:23:35,990

are both are necessary and dangerous we

492

00:23:39,880 --> 00:23:37,970

ask whether the cba will be issuing

493

00:23:41,920 --> 00:23:39,890

restrictions and imitations on all of

494

00:23:44,620 --> 00:23:41,930

these as well or are we trained further

495

00:23:46,660 --> 00:23:44,630

the cba's heavy hand falls only on those

496

00:23:48,250 --> 00:23:46,670

who are publicly exposed in a bring

497

00:23:50,680 --> 00:23:48,260

public outrage and shame upon the

498

00:23:52,660 --> 00:23:50,690

profession is Roseboro being restricted

499

00:23:56,170 --> 00:23:52,670

because of what he was doing or because

500

00:23:57,940 --> 00:23:56,180

he was caught if the latter that we are

501  
00:23:59,860 --> 00:23:57,950  
assured that there are many others

502  
00:24:01,570 --> 00:23:59,870  
within the chiropractic profession who

503  
00:24:03,520 --> 00:24:01,580  
will be similarly outed for dangerous

504  
00:24:05,110 --> 00:24:03,530  
practices because we believe that these

505  
00:24:07,360 --> 00:24:05,120  
dangerous practices are far more

506  
00:24:10,270 --> 00:24:07,370  
widespread then the CBA might be aware

507  
00:24:12,850 --> 00:24:10,280  
of or fear with these concerns in mind

508  
00:24:14,950 --> 00:24:12,860  
we are copying APRA in the a triple c on

509  
00:24:18,010 --> 00:24:14,960  
this letter we look forward to your

510  
00:24:21,340 --> 00:24:18,020  
response chiropractic board of australia

511  
00:24:23,860 --> 00:24:21,350  
responds to australian skeptics thank

512  
00:24:26,470 --> 00:24:23,870  
you for your correspondence dated 17th

513  
00:24:28,330 --> 00:24:26,480

june in relation to the recent action

514

00:24:31,930 --> 00:24:28,340

taken by the chiropractic board of

515

00:24:33,940 --> 00:24:31,940

australia the board I note the concerns

516

00:24:35,860 --> 00:24:33,950

you have identified about the

517

00:24:38,020 --> 00:24:35,870

practitioners who may have been

518

00:24:39,750 --> 00:24:38,030

performing unproven and potentially

519

00:24:42,210 --> 00:24:39,760

unsafe procedures

520

00:24:44,670 --> 00:24:42,220

your children and infants and using non

521

00:24:47,160 --> 00:24:44,680

evidence-based claims in their

522

00:24:50,810 --> 00:24:47,170

advertising and promotion the public are

523

00:24:54,300 --> 00:24:50,820

entitled to receive safe ethical and

524

00:24:56,520 --> 00:24:54,310

competent care from chiropractors the

525

00:24:59,100 --> 00:24:56,530

board regulates individual chiropractors

526  
00:25:01,440 --> 00:24:59,110  
and sets the standards they must meet

527  
00:25:03,030 --> 00:25:01,450  
the requirements for chiropractors to

528  
00:25:06,300 --> 00:25:03,040  
provide care to the public that is

529  
00:25:08,610 --> 00:25:06,310  
evidence-based is the key component of

530  
00:25:11,180 --> 00:25:08,620  
the Professional Standards codes and

531  
00:25:14,340 --> 00:25:11,190  
guidelines to which the board expects

532  
00:25:16,920 --> 00:25:14,350  
chiropractors to adhere practitioners

533  
00:25:19,050 --> 00:25:16,930  
are expected to practice safely and

534  
00:25:22,470 --> 00:25:19,060  
within the limits of their competency

535  
00:25:25,350 --> 00:25:22,480  
training and experience ahpra and the

536  
00:25:27,150 --> 00:25:25,360  
board have a number of investigations

537  
00:25:29,220 --> 00:25:27,160  
underway in relation to the

538  
00:25:32,250 --> 00:25:29,230

practitioners making claims about the

539

00:25:34,440 --> 00:25:32,260

benefits from or potentially performing

540

00:25:36,840 --> 00:25:34,450

unproven and potentially unsafe

541

00:25:38,760 --> 00:25:36,850

procedures while we cannot discuss

542

00:25:40,890 --> 00:25:38,770

individual matters to protect the

543

00:25:44,760 --> 00:25:40,900

integrity of the processes on the way

544

00:25:46,680 --> 00:25:44,770

the National Public Register is updated

545

00:25:48,960 --> 00:25:46,690

with details of action taken by the

546

00:25:50,970 --> 00:25:48,970

board to protect the public feeling

547

00:25:54,240 --> 00:25:50,980

provided will be in the show notes of

548

00:25:56,100 --> 00:25:54,250

this episode the board considers risk to

549

00:25:59,190 --> 00:25:56,110

the public each time it receives a

550

00:26:01,260 --> 00:25:59,200

notification in the specific case you

551  
00:26:03,570 --> 00:26:01,270  
have highlighted the action taken by the

552  
00:26:06,240 --> 00:26:03,580  
board reflects the action it believed

553  
00:26:08,430 --> 00:26:06,250  
was necessary to protect the public with

554  
00:26:10,890 --> 00:26:08,440  
respect to this individual practitioner

555  
00:26:13,200 --> 00:26:10,900  
based on the evidence about the way this

556  
00:26:15,450 --> 00:26:13,210  
individual practices the board will

557  
00:26:18,480 --> 00:26:15,460  
continue to act on individual cases

558  
00:26:21,150 --> 00:26:18,490  
where it is appropriate to do so in the

559  
00:26:23,160 --> 00:26:21,160  
interests of Public Protection further

560  
00:26:25,680 --> 00:26:23,170  
information about the notifications

561  
00:26:29,190 --> 00:26:25,690  
process or action may be taken by the

562  
00:26:32,190 --> 00:26:29,200  
board can be located on the ahpra

563  
00:26:35,610 --> 00:26:32,200

website including information about how

564

00:26:38,760 --> 00:26:35,620

a notification can be made thank you for

565

00:26:42,180 --> 00:26:38,770

raising this matter with me dr. Wayne

566

00:26:44,250 --> 00:26:42,190

winter am chair chiropractic board of

567

00:26:46,080 --> 00:26:44,260

Australia and that report comes to us

568

00:26:49,500 --> 00:26:46,090

from Australian skeptics written by Tim

569

00:27:05,570 --> 00:26:49,510

mendham and Iran's I give at skeptics

570

00:27:10,560 --> 00:27:08,609

it crash go garberville a skeptic wish

571

00:27:12,119 --> 00:27:10,570

to shock a desolate inches skeptic we

572

00:27:14,999 --> 00:27:12,129

service attack elbow Python hashanah

573

00:27:16,560 --> 00:27:15,009

Garnica meet the skeptics on podcast ho

574

00:27:18,930 --> 00:27:16,570

gaya vision heritage from Tosh

575

00:27:20,909 --> 00:27:18,940

metropolis add to the manual Travie like

576

00:27:23,729 --> 00:27:20,919

oh she touched a critical gondola

577

00:27:25,229 --> 00:27:23,739

station an observer a I said

578

00:27:26,909 --> 00:27:25,239

nearly is 20 and then he can shake

579

00:27:28,830 --> 00:27:26,919

member travelin coca-cola taught or

580

00:27:31,049 --> 00:27:28,840

David upon skeptical starter shaft 12

581

00:27:33,810 --> 00:27:31,059

we're just info at skeptic push bond

582

00:27:36,389 --> 00:27:33,820

Hootie man / Allen film at the Facebook

583

00:27:38,909 --> 00:27:36,399

laudanum cottage amita facebook.com /

584

00:27:44,249 --> 00:27:38,919

skeptical star Shakti Mandela's volim

585

00:27:46,379 --> 00:27:44,259

entering data dharamdas venom hi this is

586

00:27:48,389 --> 00:27:46,389

garba raas co-president of the Hungarian

587

00:27:49,710 --> 00:27:48,399

skeptics society and chairman of the

588

00:27:52,619 --> 00:27:49,720

European Council of skeptical

589

00:27:54,960 --> 00:27:52,629

organizations a solicitor of the skeptic

590

00:27:56,940 --> 00:27:54,970

zone you probably agree that educating

591

00:27:59,970 --> 00:27:56,950

others about pseudoscience and critical

592

00:28:01,560 --> 00:27:59,980

thinking is an important task if you are

593

00:28:03,389 --> 00:28:01,570

eager to take part in either of these

594

00:28:07,009 --> 00:28:03,399

activities we would be happy to hear

595

00:28:12,840 --> 00:28:07,019

from you don't hesitate to contact us at

596

00:28:14,729 --> 00:28:12,850

[www.skory.net](http://www.skory.net) skeptical hu we also

597

00:28:17,549 --> 00:28:14,739

recommend you visiting our Facebook page

598

00:28:28,580 --> 00:28:17,559

skeptic which tire shop or simply come

599

00:28:36,980 --> 00:28:33,750

here's may not spooky action at the

600

00:28:42,270 --> 00:28:40,230

I'll look it's AG it's an infrared

601  
00:28:44,779 --> 00:28:42,280  
camera here that's actually giving us

602  
00:28:47,640 --> 00:28:44,789  
images of our body and as we can see

603  
00:28:49,560 --> 00:28:47,650  
Richard Saunders is as we suspected a

604  
00:28:51,390 --> 00:28:49,570  
vampire he gives off very little heat

605  
00:28:53,159 --> 00:28:51,400  
whatsoever so he you've got have quite a

606  
00:28:55,590 --> 00:28:53,169  
small heat signature there mr. Saunders

607  
00:28:56,789 --> 00:28:55,600  
I'm a bit surprised because you and I

608  
00:28:58,080 --> 00:28:56,799  
have just been performing the mystery

609  
00:29:00,000 --> 00:28:58,090  
investigators show i feel quite

610  
00:29:02,900 --> 00:29:00,010  
energized after that although my voice

611  
00:29:05,580 --> 00:29:02,910  
is nearly gone no look I i've got a

612  
00:29:08,310 --> 00:29:05,590  
stranger pain in the middle of my back

613  
00:29:09,930 --> 00:29:08,320

so that can obviously only be my kidneys

614

00:29:11,640 --> 00:29:09,940

shutting down and my imminent death

615

00:29:12,990 --> 00:29:11,650

Richard well that will make for an

616

00:29:15,149 --> 00:29:13,000

interesting segment in the next show

617

00:29:17,220 --> 00:29:15,159

which we're doing in 45 minutes now look

618

00:29:19,110 --> 00:29:17,230

at I mean of course I mean I always go

619

00:29:21,360 --> 00:29:19,120

to that I mean you know something simple

620

00:29:23,279 --> 00:29:21,370

like you know gas or saying like that

621

00:29:27,539 --> 00:29:23,289

but I rule that out straight away we go

622

00:29:28,620 --> 00:29:27,549

to kidneys shut down because I think if

623

00:29:31,049 --> 00:29:28,630

you're going to be a hypochondriac

624

00:29:32,250 --> 00:29:31,059

you've got to go all the way I'm just

625

00:29:35,250 --> 00:29:32,260

trying to think now how to work that

626

00:29:36,270 --> 00:29:35,260

into the show okay dr. Google I think

627

00:29:38,220 --> 00:29:36,280

would be the way to work it into the

628

00:29:40,049 --> 00:29:38,230

show I think skeptics should always be

629

00:29:41,549 --> 00:29:40,059

skeptical of dr. google but I haven't

630

00:29:45,120 --> 00:29:41,559

even gone dr. Google I've just gone to

631

00:29:47,250 --> 00:29:45,130

dr. paranoid well you say you collapse

632

00:29:48,899 --> 00:29:47,260

during the show then I can say okay kids

633

00:29:50,820 --> 00:29:48,909

what do you think is wrong with my night

634

00:29:53,190 --> 00:29:50,830

on yeah because I think a room full of

635

00:29:54,990 --> 00:29:53,200

children diagnosed some dick diagnosing

636

00:29:56,310 --> 00:29:55,000

me is you know just as good you got just

637

00:29:59,580 --> 00:29:56,320

as much chance as you have a doctor

638

00:30:02,450 --> 00:29:59,590

Google you'd have to get up the front I

639

00:30:06,149 --> 00:30:02,460

think it's a subdermal hematoma oh

640

00:30:08,970 --> 00:30:06,159

thanks kid well I'll just rolled up to

641

00:30:10,830 --> 00:30:08,980

the stem reactor stall that's here as

642

00:30:11,940 --> 00:30:10,840

part of science week at the Australian

643

00:30:13,380 --> 00:30:11,950

is in lots of people buzzing around

644

00:30:15,720 --> 00:30:13,390

we've got some robots here over in a

645

00:30:17,850 --> 00:30:15,730

corner and who we got here hi my name is

646

00:30:20,789 --> 00:30:17,860

Jeanette and have you got a tertiary

647

00:30:23,880 --> 00:30:20,799

degree education have you yes I do what

648

00:30:25,500 --> 00:30:23,890

is yours in biotechnology ah and that is

649

00:30:27,690 --> 00:30:25,510

why we're out the stem reacted now you

650

00:30:28,919 --> 00:30:27,700

need to school me on this because as I

651  
00:30:30,840 --> 00:30:28,929  
have said too many people I was at

652  
00:30:32,730 --> 00:30:30,850  
University for the day so I don't know

653  
00:30:34,830 --> 00:30:32,740  
very much so what have we got in front

654  
00:30:36,510 --> 00:30:34,840  
of me and it will how is it reacting is

655  
00:30:38,159 --> 00:30:36,520  
empowering something I was reacting to

656  
00:30:39,900 --> 00:30:38,169  
something know what we're looking at

657  
00:30:42,240 --> 00:30:39,910  
today is a crime scene investigation

658  
00:30:43,980 --> 00:30:42,250  
okay so the kids are having a look at

659  
00:30:46,230 --> 00:30:43,990  
some DNA having some look at some blood

660  
00:30:48,840 --> 00:30:46,240  
spatter analysis and having a you've got

661  
00:30:50,430 --> 00:30:48,850  
luminol over there yes we do now that

662  
00:30:52,470 --> 00:30:50,440  
I've heard that one of the problems with

663  
00:30:54,510 --> 00:30:52,480

luminol is because it's so reactive to

664

00:30:56,520 --> 00:30:54,520

human DNA that you could put it on

665

00:30:59,880 --> 00:30:56,530

almost anything anywhere and you'll find

666

00:31:02,250 --> 00:30:59,890

that there's a reaction to it in this

667

00:31:04,740 --> 00:31:02,260

context we use it just as a method of

668

00:31:06,540 --> 00:31:04,750

identifying the presence of something

669

00:31:10,650 --> 00:31:06,550

but it's not specifically identifying

670

00:31:12,330 --> 00:31:10,660

individual or any type of specific like

671

00:31:15,330 --> 00:31:12,340

but I imagine would be a fairly alarm

672

00:31:17,610 --> 00:31:15,340

experience if you just put some anywhere

673

00:31:19,830 --> 00:31:17,620

on in your house for example and you'd

674

00:31:21,750 --> 00:31:19,840

probably be quite concerned look I've

675

00:31:24,300 --> 00:31:21,760

never tried that it's probably what I do

676

00:31:26,360 --> 00:31:24,310

do and that's pretty cool yeah it really

677

00:31:28,950 --> 00:31:26,370

goes off under the black light so it's

678

00:31:31,140 --> 00:31:28,960

reacting with what a human Amazon's are

679

00:31:35,310 --> 00:31:31,150

reacting with my understandings it takes

680

00:31:36,780 --> 00:31:35,320

up free radicals from oxygen right that

681

00:31:38,220 --> 00:31:36,790

is very cool there and you've also got

682

00:31:40,110 --> 00:31:38,230

some other exhibits here to do with a

683

00:31:43,290 --> 00:31:40,120

getting DNA what do we got going on here

684

00:31:45,390 --> 00:31:43,300

we've got DNA electrophoresis so both of

685

00:31:47,340 --> 00:31:45,400

these are DNA check for esa's ok now

686

00:31:49,320 --> 00:31:47,350

just explain that for myself and for the

687

00:31:51,630 --> 00:31:49,330

listener at home that that big word

688

00:31:53,400 --> 00:31:51,640

means so DNA electrophoresis is

689

00:31:57,330 --> 00:31:53,410

essentially a method for separating out

690

00:31:59,890 --> 00:31:57,340

well in DNA complex mixtures of DNA so

691

00:32:03,430 --> 00:31:59,900

DNA's of a range of sizes

692

00:32:08,740 --> 00:32:03,440

and is that mitochondrial DNA or in this

693

00:32:10,090 --> 00:32:08,750

context it'll be chromosomal DNA and our

694

00:32:13,630 --> 00:32:10,100

buddy can be used for any type of demon

695

00:32:15,190 --> 00:32:13,640

so how fast can you do a DNA test now if

696

00:32:17,830 --> 00:32:15,200

you're trying to identify someone how

697

00:32:19,720 --> 00:32:17,840

faster they got the test down to I'm not

698

00:32:22,540 --> 00:32:19,730

really familiar with that specifically

699

00:32:23,740 --> 00:32:22,550

okay but it certainly is really

700

00:32:25,270 --> 00:32:23,750

interesting in what you're doing here

701  
00:32:27,100 --> 00:32:25,280  
and there's this this here what is going

702  
00:32:29,200 --> 00:32:27,110  
on here it looks like it looks like

703  
00:32:30,880 --> 00:32:29,210  
electrolysis with something going on in

704  
00:32:33,040 --> 00:32:30,890  
the middle there it looks like it's

705  
00:32:35,260 --> 00:32:33,050  
showing a DNA sequence is it well in

706  
00:32:37,660 --> 00:32:35,270  
this case it's actually a simulation

707  
00:32:40,450 --> 00:32:37,670  
using dyes instead of dinner okay good

708  
00:32:42,520 --> 00:32:40,460  
so we use dyes because DNA is colorless

709  
00:32:44,080 --> 00:32:42,530  
so you can actually see the dyes running

710  
00:32:46,480 --> 00:32:44,090  
and it shows the method of

711  
00:32:49,420 --> 00:32:46,490  
electrophoresis and who you here

712  
00:32:51,280 --> 00:32:49,430  
representing today this is the company

713  
00:32:53,770 --> 00:32:51,290

called stem reactor so their main

714

00:32:55,060 --> 00:32:53,780

clients would be law enforcement or who

715

00:32:56,500 --> 00:32:55,070

else would want the sort of thing I know

716

00:32:58,660 --> 00:32:56,510

it's mostly for schools to bring this

717

00:33:00,220 --> 00:32:58,670

technology to see you right and so

718

00:33:02,620 --> 00:33:00,230

people can get a bit more about their

719

00:33:04,360 --> 00:33:02,630

hands on DNA because well they reckon

720

00:33:07,510 --> 00:33:04,370

that's the next wave of you know

721

00:33:08,920 --> 00:33:07,520

industrial movement sure yeah and what

722

00:33:12,000 --> 00:33:08,930

attracted you to this field in the first

723

00:33:15,430 --> 00:33:12,010

place and do usual degree this way I

724

00:33:16,960 --> 00:33:15,440

just love science so cool that's the

725

00:33:19,810 --> 00:33:16,970

correct answer for science oh I just

726

00:33:21,820 --> 00:33:19,820

love science thank you very much and

727

00:33:23,590 --> 00:33:21,830

have a have a good afternoon yet I guess

728

00:33:25,510 --> 00:33:23,600

I guess the kids are really loving the

729

00:33:26,770 --> 00:33:25,520

alumina lon the t-shirt yeah the kids

730

00:33:30,520 --> 00:33:26,780

today are having a lot of fun with it

731

00:33:31,960 --> 00:33:30,530

thank you see you thank you actually

732

00:33:33,610 --> 00:33:31,970

we've just finished out our second

733

00:33:34,870 --> 00:33:33,620

mystery investigators a show for the day

734

00:33:38,890 --> 00:33:34,880

we've got a couple of punters here who

735

00:33:41,680 --> 00:33:38,900

have we got aah Margaret right well I

736

00:33:43,660 --> 00:33:41,690

well an anonymous face painted person

737

00:33:48,220 --> 00:33:43,670

okay now what did you make of the shows

738

00:33:50,170 --> 00:33:48,230

earth is okay yet that that's usually

739

00:33:51,820 --> 00:33:50,180

what we get we get yeah it's okay i

740

00:33:53,950 --> 00:33:51,830

guess i had nothing else to do like

741

00:33:55,390 --> 00:33:53,960

standing traffic so I came and saw what

742

00:33:58,810 --> 00:33:55,400

was a bit you like what was a bit you

743

00:34:01,480 --> 00:33:58,820

liked the most um well bit with the the

744

00:34:03,760 --> 00:34:01,490

water finding it was it was pretty good

745

00:34:04,989 --> 00:34:03,770

but the kids in the audience were kept

746

00:34:07,719 --> 00:34:04,999

yelling out the numbers

747

00:34:12,009 --> 00:34:07,729

I know those pesky kids not much you can

748

00:34:14,109 --> 00:34:12,019

do but yeah yes yes oh yes oh you had

749

00:34:17,919 --> 00:34:14,119

you seen that done before um yes I saw

750

00:34:20,049 --> 00:34:17,929

it years ago okay yeah and and as a

751

00:34:22,649 --> 00:34:20,059

parent what do you think of the show I

752

00:34:24,879 --> 00:34:22,659

thought it was excellent and educational

753

00:34:26,680 --> 00:34:24,889

we don't normally work to an audience as

754

00:34:28,119 --> 00:34:26,690

young as that so too so it's little bit

755

00:34:30,129 --> 00:34:28,129

hard to get their attention maybe if it

756

00:34:31,180 --> 00:34:30,139

had some pokemon or so or jingled some

757

00:34:33,639 --> 00:34:31,190

keys in front of their face it might

758

00:34:35,349 --> 00:34:33,649

have worked better awesome puppies and

759

00:34:38,799 --> 00:34:35,359

kittens that might have helped these in

760

00:34:41,259 --> 00:34:38,809

kitchens yes yes you could try and hide

761

00:34:42,639 --> 00:34:41,269

a puppy or kitten I'll shoot that is

762

00:34:44,440 --> 00:34:42,649

true although it's hard enough carrying

763

00:34:45,639 --> 00:34:44,450

around the bed of nails I think the

764

00:34:47,349 --> 00:34:45,649

puppies and kittens would make it more

765

00:34:48,700 --> 00:34:47,359

trouble than yes and you could actually

766

00:34:51,099 --> 00:34:48,710

have some fun with the puppies and the

767

00:34:52,629 --> 00:34:51,109

kittens and the bed of nails oh yeah

768

00:34:54,549 --> 00:34:52,639

that's a special adults show we're gonna

769

00:34:58,269 --> 00:34:54,559

have to work on there and did you like

770

00:35:00,009 --> 00:34:58,279

the show it was weird that's that's the

771

00:35:02,740 --> 00:35:00,019

reaction we like did you have a favorite

772

00:35:03,970 --> 00:35:02,750

bit at all no no yeah that's all I've

773

00:35:06,039 --> 00:35:03,980

got a favor bit of the show either when

774

00:35:08,349 --> 00:35:06,049

I think that has true okay the trombone

775

00:35:12,910 --> 00:35:08,359

the trauma the trombone a welcome

776

00:35:14,799 --> 00:35:12,920

addition yeah well yeah I like when I

777

00:35:32,900 --> 00:35:14,809

stand on Richard Saunders to thank you

778

00:35:39,090 --> 00:35:35,450

Australian skeptics National Convention

779

00:35:41,850 --> 00:35:39,100

2016 will be hosted in Melbourne at the

780

00:35:44,520 --> 00:35:41,860

university of melbourne from the 25th to

781

00:35:46,470 --> 00:35:44,530

the 27th of november with the annual

782

00:35:49,140 --> 00:35:46,480

dinner being held at melbourne zoo on

783

00:35:53,430 --> 00:35:49,150

the evening of the 26th of November

784

00:35:56,760 --> 00:35:53,440

early bird ticket sales are online at

785

00:36:00,060 --> 00:35:56,770

the convention website convention dot

786

00:36:01,980 --> 00:36:00,070

skeptics calm today you and if you get

787

00:36:04,260 --> 00:36:01,990

an early bird ticket you'll receive a

788

00:36:08,190 --> 00:36:04,270

discount and be able to reserve seats

789

00:36:10,080 --> 00:36:08,200

close to the stage we can confirm that

790

00:36:13,560 --> 00:36:10,090

speakers for the convention will include

791

00:36:17,520 --> 00:36:13,570

Lawrence Krauss Ed's odd Ernst Harriet

792

00:36:20,160 --> 00:36:17,530

hall Michael Marshall Katie Mac and Mel

793

00:36:24,720 --> 00:36:20,170

Thompson with many more great speakers

794

00:36:26,900 --> 00:36:24,730

to be announced soon nicholas j johnson

795

00:36:29,400 --> 00:36:26,910

is our emcee for the annual dinner

796

00:36:32,370 --> 00:36:29,410

information about our speakers is

797

00:36:35,910 --> 00:36:32,380

available from the convention website so

798

00:36:50,230 --> 00:36:35,920

that's convention dot skeptics com got a

799

00:36:54,320 --> 00:36:52,610

thank you for listening to the skeptic

800

00:36:57,050 --> 00:36:54,330

zone and thanks again for those people

801  
00:36:59,930 --> 00:36:57,060  
are very generous people who help the

802  
00:37:03,020 --> 00:36:59,940  
skeptic zone by paypal or indeed at

803  
00:37:05,530 --> 00:37:03,030  
patreon no its Henrietta she's come back

804  
00:37:08,060 --> 00:37:05,540  
did you enjoy your kibbles you did hello

805  
00:37:10,850 --> 00:37:08,070  
she's right under the microphone now on

806  
00:37:12,620 --> 00:37:10,860  
a little stand those people who do help

807  
00:37:14,450 --> 00:37:12,630  
the skeptic zone via those methods and

808  
00:37:19,900 --> 00:37:14,460  
you can have a look at doing that at

809  
00:37:22,310 --> 00:37:19,910  
skeptic zone dot TV I think these hello

810  
00:37:26,240 --> 00:37:22,320  
now her tail is that an earth could

811  
00:37:28,580 --> 00:37:26,250  
craft man your contribution each week or

812  
00:37:31,400 --> 00:37:28,590  
each month means the skeptic zone can

813  
00:37:35,030 --> 00:37:31,410

stay on air or on the internet in your

814

00:37:39,080 --> 00:37:35,040

headphones that's where it belongs leave

815

00:37:41,360 --> 00:37:39,090

for that alone I hope to meet some

816

00:37:42,920 --> 00:37:41,370

skeptics own fans at the Australian

817

00:37:46,880 --> 00:37:42,930

skeptics dinner meeting here in Sydney

818

00:37:49,340 --> 00:37:46,890

on the twenty-fourth of sep tember and

819

00:37:51,620 --> 00:37:49,350

our special guest speaker will be Lynn

820

00:37:54,470 --> 00:37:51,630

Kelly all about the memory code more

821

00:37:56,840 --> 00:37:54,480

information skeptics calm today you and

822

00:38:00,350 --> 00:37:56,850

don't forget the regular skeptics in the

823

00:38:03,500 --> 00:38:00,360

pub at the crown hotel first thursday of

824

00:38:05,240 --> 00:38:03,510

the month and i have just had

825

00:38:09,110 --> 00:38:05,250

notification that we're going to do

826

00:38:11,570 --> 00:38:09,120

another skeptic zone live in a couple of

827

00:38:13,610 --> 00:38:11,580

months time i'll keep you informed about

828

00:38:16,160 --> 00:38:13,620

that will get some of the skeptic zone

829

00:38:18,380 --> 00:38:16,170

crew those who can make it and we'll do

830

00:38:19,610 --> 00:38:18,390

a live show a live recording of the

831

00:38:22,370 --> 00:38:19,620

skeptics aren't a lot of fun there'll be

832

00:38:24,170 --> 00:38:22,380

some giveaways as well i think that's

833

00:38:26,780 --> 00:38:24,180

probably going to be in october but will

834

00:38:28,340 --> 00:38:26,790

confirm that pretty soon ok these two

835

00:38:30,890 --> 00:38:28,350

cats are telling me to get out of their

836

00:38:34,690 --> 00:38:30,900

area i think they've had enough of me

837

00:38:38,450 --> 00:38:34,700

today alright you want some more kibble

838

00:38:40,010 --> 00:38:38,460

why doesn't that surprise me but for

839

00:38:43,780 --> 00:38:40,020

this week this is Richard Saunders

840

00:38:50,020 --> 00:38:43,790

Henrietta and more the skeptical cats

841

00:38:55,730 --> 00:38:52,430

you've been listening to the skeptics

842

00:38:59,120 --> 00:38:55,740

own podcast visit our website at wwc

843

00:39:02,540 --> 00:38:59,130

aiptek zoomtv for contacts and archive

844

00:39:05,270 --> 00:39:02,550

of all episodes since 2008 and our

845

00:39:07,180 --> 00:39:05,280

online store please support the skeptic

846

00:39:10,339 --> 00:39:07,190

zone by following us on twitter at

847

00:39:13,970 --> 00:39:10,349

skeptic zone liking us on facebook and

848

00:39:16,130 --> 00:39:13,980

leaving a review on iTunes you can also

849

00:39:19,299 --> 00:39:16,140

show your support by subscribing via

850

00:39:22,099 --> 00:39:19,309

paypal for as little as 99 cents a week

851

00:39:23,690 --> 00:39:22,109

the skeptic zone is an independent

852

00:39:26,150 --> 00:39:23,700

production the views and opinions

853

00:39:28,220 --> 00:39:26,160

expressed on the skeptic zone and not

854

00:39:30,650 --> 00:39:28,230

necessarily those of Australian skeptic