

Episode **577**

THE  
**SKEPTIC  
ZONE**  
PODCAST

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3 November 2019

The Skeptic Zone Podcast  
Episode **577** - 3 November 2019



Homeopathy sinking  
in the UK with  
Michael Marshall

Rob Palmer  
CSIcon interviews part #2

Tim Mendham  
Nerds and Skeptics



The Skeptic Zone Podcast  
Episode **577** - 3 November 2019



1  
00:00:13,920 --> 00:00:09,119  
welcome to the skeptic zone the podcast

2  
00:00:16,900 --> 00:00:13,930  
from Australia for science and reason

3  
00:00:22,320 --> 00:00:16,910  
[Applause]

4  
00:00:24,730 --> 00:00:22,330  
[Music]

5  
00:00:28,240 --> 00:00:24,740  
yes it's the skeptics own podcast

6  
00:00:29,890 --> 00:00:28,250  
episode number 577 for the third of

7  
00:00:32,170 --> 00:00:29,900  
November 2019

8  
00:00:34,780 --> 00:00:32,180  
this is Richard Saunders coming to you

9  
00:00:36,670 --> 00:00:34,790  
this week from the Melbourne studios of

10  
00:00:39,220 --> 00:00:36,680  
the skeptic zone well otherwise known as

11  
00:00:42,490 --> 00:00:39,230  
the house of my friend and longtime

12  
00:00:44,830 --> 00:00:42,500  
skeptic dr. Steve Roberts I'm in

13  
00:00:45,970 --> 00:00:44,840

Melbourne to have a quick visit and chat

14

00:00:49,330 --> 00:00:45,980

to some people about the upcoming

15

00:00:51,670 --> 00:00:49,340

skeptic on in early December in fact I

16

00:00:54,610 --> 00:00:51,680

had a really nice evening just a few

17

00:00:56,799 --> 00:00:54,620

days ago with some of the vic skeptics

18

00:00:59,649 --> 00:00:56,809

committee we made a little promotional

19

00:01:01,479 --> 00:00:59,659

video for the convention and i must say

20

00:01:06,070 --> 00:01:01,489

I'm very impressed with the venue which

21

00:01:07,870 --> 00:01:06,080

is in Melbourne University but more

22

00:01:10,300 --> 00:01:07,880

about that I think on next week's show

23

00:01:12,580 --> 00:01:10,310

as I chat to some more people about the

24

00:01:16,149 --> 00:01:12,590

upcoming convention on this week's show

25

00:01:18,790 --> 00:01:16,159

on this week's show homeopathy again

26  
00:01:20,590 --> 00:01:18,800  
again with the homeopathy we speak once

27  
00:01:23,170 --> 00:01:20,600  
more to Michael Marshall from the good

28  
00:01:27,370 --> 00:01:23,180  
thinking society in the UK because the

29  
00:01:30,399 --> 00:01:27,380  
head of the NHS in the UK has launched a

30  
00:01:33,789 --> 00:01:30,409  
very outspoken attack on homeopathy and

31  
00:01:36,819 --> 00:01:33,799  
the peddling of deadly anti vaccine

32  
00:01:40,120 --> 00:01:36,829  
myths Michael Marshall will fill us in

33  
00:01:42,880 --> 00:01:40,130  
on the latest from that story after that

34  
00:01:45,609 --> 00:01:42,890  
it's part two of the psych on interviews

35  
00:01:47,770 --> 00:01:45,619  
by guest reporter Rob Palmer this week

36  
00:01:48,880 --> 00:01:47,780  
Rob talks to Elizabeth Loftus about

37  
00:01:51,069 --> 00:01:48,890  
false memories

38  
00:01:54,899 --> 00:01:51,079

Jim Underdown about investigating

39

00:01:58,060 --> 00:01:54,909

paranormal claims Janis boyington about

40

00:02:01,569 --> 00:01:58,070

facilitated communication and Joe

41

00:02:03,310 --> 00:02:01,579

Schwartz about demystifying science then

42

00:02:05,469 --> 00:02:03,320

to round off this week's episode another

43

00:02:08,169 --> 00:02:05,479

reading from the skeptic by the editor

44

00:02:11,800 --> 00:02:08,179

Tim Mendham Tim is going to read an

45

00:02:14,710 --> 00:02:11,810

article called geeks gamers nerds and

46

00:02:19,960 --> 00:02:14,720

kids now what is the crossover between

47

00:02:21,610 --> 00:02:19,970

nerds and skeptics probably quite a lot

48

00:02:24,070 --> 00:02:21,620

when I think about it that's coming up

49

00:02:26,230 --> 00:02:24,080

to round off the show well that's all

50

00:02:28,630 --> 00:02:26,240

from me at the moment it's time for me

51  
00:02:30,160 --> 00:02:28,640  
to run out the door and have a rest

52  
00:02:33,220 --> 00:02:30,170  
because last night

53  
00:02:33,600 --> 00:02:33,230  
Steve took me out to just around the

54  
00:02:36,000 --> 00:02:33,610  
corner

55  
00:02:38,760 --> 00:02:36,010  
to an all-you-can-eat Sri Lankan

56  
00:02:40,740 --> 00:02:38,770  
restaurant holy mackerel

57  
00:02:43,650 --> 00:02:40,750  
actually there wasn't any macaron menu

58  
00:02:47,390 --> 00:02:43,660  
there were lots of wonderful vegetarian

59  
00:02:50,640 --> 00:02:47,400  
curries in a few meat ones and these

60  
00:02:53,430 --> 00:02:50,650  
beautifully cooked Sri Lankan food if

61  
00:02:56,250 --> 00:02:53,440  
you're in fitzroy north while I go

62  
00:02:59,380 --> 00:02:56,260  
outside and recover from last night's

63  
00:03:07,690 --> 00:02:59,390

dinner I hope you enjoy this kept exam

64

00:03:10,720 --> 00:03:07,700

[Music]

65

00:03:24,460 --> 00:03:10,730

[Applause]

66

00:03:26,480 --> 00:03:24,470

[Music]

67

00:03:28,610 --> 00:03:26,490

joining me now on the line from

68

00:03:30,590 --> 00:03:28,620

Liverpool in the UK it's Michael

69

00:03:32,420 --> 00:03:30,600

Marshall hello Marsh hey Richard how you

70

00:03:34,190 --> 00:03:32,430

doing I'm doing really well thanks for

71

00:03:37,340 --> 00:03:34,200

this a quick interview a quick catch-up

72

00:03:38,990 --> 00:03:37,350

because just when I woke up this morning

73

00:03:41,120 --> 00:03:39,000

I'm seeing lots of news coming out of

74

00:03:42,710 --> 00:03:41,130

the UK regarding homeopathy can you give

75

00:03:47,630 --> 00:03:42,720

our listeners a quick overview about

76  
00:03:50,060 --> 00:03:47,640  
this yeah absolutely so remember I was

77  
00:03:52,400 --> 00:03:50,070  
on a couple of months ago talking about

78  
00:03:53,930 --> 00:03:52,410  
the case we're bringing against the

79  
00:03:56,630 --> 00:03:53,940  
Society of homeopaths or rather the

80  
00:03:58,100 --> 00:03:56,640  
government body that's given a stamp of

81  
00:04:02,200 --> 00:03:58,110  
legitimacy to this site you've

82  
00:04:04,850 --> 00:04:02,210  
homeopaths and what actually happened is

83  
00:04:06,950 --> 00:04:04,860  
the head of NHS England so the head of

84  
00:04:10,880 --> 00:04:06,960  
the NHS here in the UK has actually

85  
00:04:14,120 --> 00:04:10,890  
written a letter of support for a kind

86  
00:04:17,000 --> 00:04:14,130  
of appeal support for our case and he

87  
00:04:19,010 --> 00:04:17,010  
sent this letter which is quite a robust

88  
00:04:21,199 --> 00:04:19,020

letter I was very surprised to see how

89

00:04:23,060 --> 00:04:21,209

how strong and actually was he said to

90

00:04:24,680 --> 00:04:23,070

the to the Professional Standards

91

00:04:26,360 --> 00:04:24,690

Authority who were creditor start

92

00:04:28,820 --> 00:04:26,370

appointee pass and this letter is

93

00:04:32,240 --> 00:04:28,830

explaining how it's misleading and

94

00:04:34,940 --> 00:04:32,250

dangerous for homeopathy to get

95

00:04:36,500 --> 00:04:34,950

government accreditation it even goes as

96

00:04:38,630 --> 00:04:36,510

far as to say and it's a probably

97

00:04:41,330 --> 00:04:38,640

probably further than I would say he

98

00:04:43,970 --> 00:04:41,340

says that anything that gives a veneer

99

00:04:46,280 --> 00:04:43,980

of legitimacy to homeopathy gives the

100

00:04:48,620 --> 00:04:46,290

opportunity for chances to con the

101  
00:04:50,210 --> 00:04:48,630  
public out of out of their money and and

102  
00:04:52,850 --> 00:04:50,220  
for the health of risk which was

103  
00:04:55,100 --> 00:04:52,860  
incredibly strong stuff and not only did

104  
00:04:56,360 --> 00:04:55,110  
he send this letter to the Professional

105  
00:04:57,920 --> 00:04:56,370  
Standards Authority he also sent to

106  
00:04:59,659 --> 00:04:57,930  
every national newspaper in the UK and

107  
00:05:01,280 --> 00:04:59,669  
so it was actually front page of The

108  
00:05:04,790 --> 00:05:01,290  
Daily Mail print edition today the main

109  
00:05:07,370 --> 00:05:04,800  
story was the NHS head of the NHS

110  
00:05:09,080 --> 00:05:07,380  
throwing his support behind our calls to

111  
00:05:11,180 --> 00:05:09,090  
have the society HomePath stricken from

112  
00:05:14,600 --> 00:05:11,190  
the government register so it's been

113  
00:05:16,070 --> 00:05:14,610

quite a an incredible day of coverage

114

00:05:17,750 --> 00:05:16,080

they approached every single national

115

00:05:20,180 --> 00:05:17,760

newspaper in the UK has a cover story

116

00:05:22,850 --> 00:05:20,190

I've been on several national radio

117

00:05:26,000 --> 00:05:22,860

stations talking about it and to have

118

00:05:28,610 --> 00:05:26,010

the support and the weight of the NHS

119

00:05:31,460 --> 00:05:28,620

behind what we're doing is just a

120

00:05:34,250 --> 00:05:31,470

incredible incredible development it

121

00:05:36,830 --> 00:05:34,260

really is what what do you attribute it

122

00:05:40,010 --> 00:05:36,840

the interest in the media such a big

123

00:05:41,150 --> 00:05:40,020

interest in the media to this story well

124

00:05:43,760 --> 00:05:41,160

I think there's a couple of elements to

125

00:05:45,350 --> 00:05:43,770

it really first of all it's not often

126  
00:05:46,820 --> 00:05:45,360  
that the head of the HS comes out and

127  
00:05:48,350 --> 00:05:46,830  
makes a statement like this it's it's

128  
00:05:49,670 --> 00:05:48,360  
pretty much unprecedented he

129  
00:05:52,600 --> 00:05:49,680  
occasionally said some things about

130  
00:05:56,000 --> 00:05:52,610  
homeopathy but for him to be so specific

131  
00:05:58,340 --> 00:05:56,010  
about what needs to be done is is pretty

132  
00:05:59,930 --> 00:05:58,350  
huge really so there's that and there's

133  
00:06:02,900 --> 00:05:59,940  
also as it happens at the moment the

134  
00:06:07,010 --> 00:06:02,910  
Daily Mail is running a very very

135  
00:06:08,960 --> 00:06:07,020  
high-profile campaign about vaccinations

136  
00:06:11,330 --> 00:06:08,970  
they're trying to if their campaign to

137  
00:06:13,460 --> 00:06:11,340  
as they call it end vaccine ignorance

138  
00:06:15,110 --> 00:06:13,470

and to raise awareness in the public of

139

00:06:17,480 --> 00:06:15,120

the importance of vaccines so it's kind

140

00:06:19,930 --> 00:06:17,490

of a perfect time for the mailto to

141

00:06:22,910 --> 00:06:19,940

splash on this quite quite significantly

142

00:06:24,950 --> 00:06:22,920

and I think it also comes just as we see

143

00:06:26,540 --> 00:06:24,960

we're seeing a lot of stories in the UK

144

00:06:29,060 --> 00:06:26,550

press in the pond about the falling

145

00:06:30,650 --> 00:06:29,070

vaccination rates we are starting to get

146

00:06:33,140 --> 00:06:30,660

to a position where vaccination rates

147

00:06:34,850 --> 00:06:33,150

are dropping quite significantly and

148

00:06:37,100 --> 00:06:34,860

fortunately because we've got a media

149

00:06:38,810 --> 00:06:37,110

who remembers the last time around and

150

00:06:41,870 --> 00:06:38,820

remembers the part they played the last

151  
00:06:43,550 --> 00:06:41,880  
time around the UK media is surprisingly

152  
00:06:46,100 --> 00:06:43,560  
responsible when it comes to vaccination

153  
00:06:48,440 --> 00:06:46,110  
information so as we see more and more

154  
00:06:50,210 --> 00:06:48,450  
people starting to eschew vaccines and

155  
00:06:51,770 --> 00:06:50,220  
more and more people like homeopathy

156  
00:06:52,760 --> 00:06:51,780  
saying that vaccines dangerous and all

157  
00:06:55,310 --> 00:06:52,770  
this kind of all the kind of

158  
00:06:57,500 --> 00:06:55,320  
misinformation we see the nuclear media

159  
00:06:59,510 --> 00:06:57,510  
is immediately recognizing the dangers

160  
00:07:01,610 --> 00:06:59,520  
of this and is stepping in to sort of

161  
00:07:03,080 --> 00:07:01,620  
start their own campaign to point out

162  
00:07:04,790 --> 00:07:03,090  
how dangerous it is and how important is

163  
00:07:06,920 --> 00:07:04,800

that we vaccinate so I think it's coming

164

00:07:08,350 --> 00:07:06,930

at just at the right time where the

165

00:07:11,150 --> 00:07:08,360

media has the right source of

166

00:07:12,860 --> 00:07:11,160

sensibility for this and just as it

167

00:07:14,150 --> 00:07:12,870

becomes it's becoming a significant

168

00:07:16,850 --> 00:07:14,160

enough issue for us to be concerned

169

00:07:19,400 --> 00:07:16,860

about UK and I think it is also credit

170

00:07:21,410 --> 00:07:19,410

to you and the good thinking Society for

171

00:07:23,020 --> 00:07:21,420

helping to provide the information and

172

00:07:26,360 --> 00:07:23,030

getting publicity out there getting the

173

00:07:28,280 --> 00:07:26,370

general awareness of the community to a

174

00:07:29,900 --> 00:07:28,290

state that these sort of things are

175

00:07:32,810 --> 00:07:29,910

happening and what I'll do Marsh

176  
00:07:34,790 --> 00:07:32,820  
after we say goodbye I'll read a little

177  
00:07:37,130 --> 00:07:34,800  
bit about what the Daily Mail had to say

178  
00:07:39,290 --> 00:07:37,140  
in regards to this story but what

179  
00:07:41,750 --> 00:07:39,300  
prompted do you think the head of the

180  
00:07:42,500 --> 00:07:41,760  
NHS to make such a strong statement well

181  
00:07:44,930 --> 00:07:42,510  
it's hard to know

182  
00:07:47,000 --> 00:07:44,940  
for sure but I do know that at the

183  
00:07:50,240 --> 00:07:47,010  
moment the society homeopaths is seeking

184  
00:07:51,950 --> 00:07:50,250  
to be recreated for 2020 and as part of

185  
00:07:55,240 --> 00:07:51,960  
that the PSA the body who recreates them

186  
00:07:58,010 --> 00:07:55,250  
has sort of cast a wide net looking for

187  
00:08:00,020 --> 00:07:58,020  
opinions and expertise and experience

188  
00:08:02,210 --> 00:08:00,030

about whether the psychopath should

189

00:08:04,940 --> 00:08:02,220

retain their status and in doing that I

190

00:08:06,980 --> 00:08:04,950

obviously sent them a my opinion of my

191

00:08:08,360 --> 00:08:06,990

response which was we do have concerns

192

00:08:10,040 --> 00:08:08,370

about the society homeopaths and if you

193

00:08:11,270 --> 00:08:10,050

wonder what those concerns are look to

194

00:08:13,100 --> 00:08:11,280

the legal case we're currently pretty

195

00:08:15,110 --> 00:08:13,110

damaged and a few because that contains

196

00:08:17,570 --> 00:08:15,120

a lot of health concerns yeah but I also

197

00:08:19,790 --> 00:08:17,580

emailed and wrote to several different

198

00:08:21,530 --> 00:08:19,800

sort of medical bodies and medical

199

00:08:23,660 --> 00:08:21,540

authorities who've been vocal about

200

00:08:25,700 --> 00:08:23,670

homeopathy and vaccinations and one of

201  
00:08:27,740 --> 00:08:25,710  
them was NHS England and Simon Stephens

202  
00:08:30,230 --> 00:08:27,750  
the head of it NHS England so I actually

203  
00:08:31,490 --> 00:08:30,240  
emailed NHS England and said this

204  
00:08:34,940 --> 00:08:31,500  
consultation kind of thing is happening

205  
00:08:36,530 --> 00:08:34,950  
with the PSA and if you feel strongly

206  
00:08:39,650 --> 00:08:36,540  
about this as we do might be worth you

207  
00:08:41,210 --> 00:08:39,660  
sending some some faults over I heard

208  
00:08:42,770 --> 00:08:41,220  
back from their office from Simon

209  
00:08:44,270 --> 00:08:42,780  
Stephens office saying thanks for bring

210  
00:08:45,500 --> 00:08:44,280  
this to our attention we'll look into

211  
00:08:47,120 --> 00:08:45,510  
this and I didn't hear anything further

212  
00:08:49,190 --> 00:08:47,130  
so it might be that they were always

213  
00:08:50,600 --> 00:08:49,200

planning to send this letter it might be

214

00:08:51,890 --> 00:08:50,610

that they've independently come across

215

00:08:53,870 --> 00:08:51,900

it but certainly no I brought it to

216

00:08:55,910 --> 00:08:53,880

their attention and lo and behold a

217

00:08:58,340 --> 00:08:55,920

little wilder to this this incredibly

218

00:09:00,140 --> 00:08:58,350

strong letter gets sent not just to the

219

00:09:02,960 --> 00:09:00,150

PSA but to every national newspaper so

220

00:09:04,910 --> 00:09:02,970

it might actually be that we played some

221

00:09:08,030 --> 00:09:04,920

part of it a good thinking to get this

222

00:09:09,740 --> 00:09:08,040

get this whole wheel moving great Marsh

223

00:09:11,660 --> 00:09:09,750

thank you very much for that quick

224

00:09:13,520 --> 00:09:11,670

update and I'm going to be very

225

00:09:14,870 --> 00:09:13,530

interested to see what's going to happen

226

00:09:16,700 --> 00:09:14,880

over the next few weeks with the

227

00:09:19,520 --> 00:09:16,710

response from the homeopaths and various

228

00:09:22,100 --> 00:09:19,530

people crying foul and bringing up all

229

00:09:24,230 --> 00:09:22,110

sorts of objections but I think things

230

00:09:26,150 --> 00:09:24,240

are on the right track it definitely

231

00:09:27,530 --> 00:09:26,160

feels that way and fingers crossed in

232

00:09:29,870 --> 00:09:27,540

the next few months I'll be able to come

233

00:09:33,380 --> 00:09:29,880

back and advise you of the next kind of

234

00:09:35,210 --> 00:09:33,390

victory in our campaign absolutely once

235

00:09:39,420 --> 00:09:35,220

again Michael Marshall from the good

236

00:09:47,710 --> 00:09:43,090

and this comes from the daily mail

237

00:09:50,889 --> 00:09:47,720

online daily mail code on UK NH s chief

238

00:09:53,410 --> 00:09:50,899

Simon Stevin blasts homeopathy as

239

00:09:57,370 --> 00:09:53,420

dangerous and blames the industry for

240

00:10:00,340 --> 00:09:57,380

fuelling anti-vaxxer Minh Stevens has

241

00:10:03,250 --> 00:10:00,350

urged medical watchdog to delist Society

242

00:10:07,389 --> 00:10:03,260

of homeopaths described some homeopaths

243

00:10:10,000 --> 00:10:07,399

as chances who con public to part with

244

00:10:12,759 --> 00:10:10,010

money but the group says it does not

245

00:10:15,550 --> 00:10:12,769

promote any treatment contrary to NHS

246

00:10:17,829 --> 00:10:15,560

guidance this is by Sophie Borland and

247

00:10:21,220 --> 00:10:17,839

it was published on the 28th of October

248

00:10:23,470 --> 00:10:21,230

the head of NHS today launches an

249

00:10:26,259 --> 00:10:23,480

outspoken attack on the homeopathy

250

00:10:29,590 --> 00:10:26,269

industry for peddling deadly anti

251  
00:10:31,920 --> 00:10:29,600  
vaccine myths Simon Stephens accuses

252  
00:10:35,079 --> 00:10:31,930  
practitioners of spreading toxic

253  
00:10:37,720 --> 00:10:35,089  
misinformation about jabs which pose

254  
00:10:40,360 --> 00:10:37,730  
quote a significant danger to human

255  
00:10:43,930 --> 00:10:40,370  
health end quote in a key intervention

256  
00:10:46,329 --> 00:10:43,940  
he urges the medical watchdog to delist

257  
00:10:48,370 --> 00:10:46,339  
the Society of homeopaths from its

258  
00:10:50,410 --> 00:10:48,380  
official register of professional

259  
00:10:52,720 --> 00:10:50,420  
organisations saying the body's

260  
00:10:55,120 --> 00:10:52,730  
inclusion sends a message to patients

261  
00:10:57,550 --> 00:10:55,130  
that homeopathic remedies are as safe

262  
00:11:00,610 --> 00:10:57,560  
and effective as clinically tested

263  
00:11:04,030 --> 00:11:00,620

medicines mr. Stevens described some

264

00:11:05,350 --> 00:11:04,040

homeopaths as chances who are conning

265

00:11:08,949 --> 00:11:05,360

the public to part with their

266

00:11:10,889 --> 00:11:08,959

hard-earned cash he also warns that some

267

00:11:13,840 --> 00:11:10,899

therapists are pushing ineffective

268

00:11:16,600 --> 00:11:13,850

homeopathic vaccines which leave

269

00:11:19,960 --> 00:11:16,610

patients exposed to deadly diseases such

270

00:11:22,809 --> 00:11:19,970

as measles but the Society of homeopaths

271

00:11:25,360 --> 00:11:22,819

the UK's largest group of registered

272

00:11:27,759 --> 00:11:25,370

practitioners insists that it does not

273

00:11:30,730 --> 00:11:27,769

promote any treatment contrary to NHS

274

00:11:33,460 --> 00:11:30,740

guidance including vaccinations the item

275

00:11:36,730 --> 00:11:33,470

goes on to say in his letter mr. Stevens

276  
00:11:39,189 --> 00:11:36,740  
says he has serious concerns about the

277  
00:11:42,160 --> 00:11:39,199  
Society's inclusion because the practice

278  
00:11:44,800 --> 00:11:42,170  
of homeopathy remained fundamentally

279  
00:11:47,290 --> 00:11:44,810  
flawed he said its accreditation would

280  
00:11:49,509 --> 00:11:47,300  
give a false impression to patients that

281  
00:11:52,000 --> 00:11:49,519  
homeopathic remedies are as trusted as

282  
00:11:53,620 --> 00:11:52,010  
the treatments used by doctors nurses

283  
00:11:56,170 --> 00:11:53,630  
and other professionals on the register

284  
00:11:58,930 --> 00:11:56,180  
quote this is a vital issue at a time

285  
00:12:01,630 --> 00:11:58,940  
when there is a rise of misinformation

286  
00:12:03,670 --> 00:12:01,640  
about vaccines some of which is

287  
00:12:06,730 --> 00:12:03,680  
apparently promoted by homeopathy and

288  
00:12:07,480 --> 00:12:06,740

which poses a significant danger to

289

00:12:10,630 --> 00:12:07,490

human health

290

00:12:13,060 --> 00:12:10,640

end quote he adds emphasizing his point

291

00:12:16,270 --> 00:12:13,070

last night mr. Stevens said quote

292

00:12:19,480 --> 00:12:16,280

anything that gives homeopathy a veer of

293

00:12:21,910 --> 00:12:19,490

credibility risks chances being able to

294

00:12:24,820 --> 00:12:21,920

con more people into parting with their

295

00:12:27,640 --> 00:12:24,830

hard-earned cash in return for bogus

296

00:12:30,190 --> 00:12:27,650

treatments which at best do nothing and

297

00:12:32,920 --> 00:12:30,200

at worst can be potentially dangerous

298

00:12:35,140 --> 00:12:32,930

end quote we read on later where Michael

299

00:12:37,390 --> 00:12:35,150

marshal is quoted Michael marshal of the

300

00:12:40,090 --> 00:12:37,400

pro science charity good thinking said

301  
00:12:42,370 --> 00:12:40,100  
quote any organization or practitioner

302  
00:12:44,740 --> 00:12:42,380  
who is spreading anti-vaccine

303  
00:12:45,250 --> 00:12:44,750  
is particularly dangerous right now end

304  
00:12:47,950 --> 00:12:45,260  
quote

305  
00:12:50,890 --> 00:12:47,960  
email is urging the government to launch

306  
00:12:56,290 --> 00:12:50,900  
a mass publicity drive advocating the

307  
00:12:57,970 --> 00:12:56,300  
safety of vaccines and that particular

308  
00:13:02,290 --> 00:12:57,980  
story comes to us from The Daily Mail

309  
00:13:05,420 --> 00:13:02,300  
Daily Mail Co UK and I will put a link

310  
00:13:26,550 --> 00:13:05,430  
in this week's show notes

311  
00:13:31,870 --> 00:13:28,180  
hey Richard

312  
00:13:33,280 --> 00:13:31,880  
oh hi Trish hi would you like a coffee

313  
00:13:35,590 --> 00:13:33,290

yeah thanks what are you working on I'm

314

00:13:37,889 --> 00:13:35,600

trying to come up with a new promo to

315

00:13:41,350 --> 00:13:37,899

play on the sceptic zone who's it for

316

00:13:43,870 --> 00:13:41,360

good thinking Society in the UK you know

317

00:13:45,490 --> 00:13:43,880

these oh yeah I know them the guys who

318

00:13:47,620 --> 00:13:45,500

recently chased the homeopaths out of

319

00:13:49,569 --> 00:13:47,630

the UK public health system oh did they

320

00:13:50,740 --> 00:13:49,579

yeah they campaigned and lobbied

321

00:13:53,889 --> 00:13:50,750

government for a while and now you

322

00:13:55,210 --> 00:13:53,899

cannot get homeopathy on the NHS so they

323

00:13:57,220 --> 00:13:55,220

can now spend public money on health

324

00:13:59,590 --> 00:13:57,230

care that works Yeah right look I'll

325

00:14:04,150 --> 00:13:59,600

mention that in the promo now their

326

00:14:06,009 --> 00:14:04,160

website is good thinking society org and

327

00:14:07,509 --> 00:14:06,019

that website is a good resource for

328

00:14:09,519 --> 00:14:07,519

learning more about quackery

329

00:14:10,900 --> 00:14:09,529

thanks Trish that gives me something

330

00:14:17,150 --> 00:14:10,910

good to think about

331

00:14:17,160 --> 00:14:23,600

[Music]

332

00:14:28,980 --> 00:14:26,910

hi this is Rob Palmer also known as the

333

00:14:31,050 --> 00:14:28,990

well-known skeptic I ran for such

334

00:14:32,880 --> 00:14:31,060

publications as the skeptical Inquirer

335

00:14:37,400 --> 00:14:32,890

and I'm also involved with the guerrilla

336

00:14:39,840 --> 00:14:37,410

skepticism on Wikipedia project gso w

337

00:14:42,300 --> 00:14:39,850

this week I bring you part two of my

338

00:14:43,110 --> 00:14:42,310

interview series from saikhan 2019 in

339

00:14:45,840 --> 00:14:43,120

Las Vegas

340

00:14:46,560 --> 00:14:45,850

I talked to Elizabeth Loftus about false

341

00:14:48,750 --> 00:14:46,570

memories

342

00:14:51,780 --> 00:14:48,760

Jim Underdown about investigating

343

00:14:54,510 --> 00:14:51,790

paranormal claims Jan is a blatant about

344

00:15:03,930 --> 00:14:54,520

facilitated communication and Joe Swartz

345

00:15:06,360 --> 00:15:03,940

about the mystifying science just ran

346

00:15:08,310 --> 00:15:06,370

into Elizabeth Loftus and she's going to

347

00:15:10,500 --> 00:15:08,320

be a speaker at the conference right now

348

00:15:13,170 --> 00:15:10,510

she's signing an autograph of witness

349

00:15:18,480 --> 00:15:13,180

for the defense for ED there there you

350

00:15:22,950 --> 00:15:18,490

go and now I'm going to ask her so

351

00:15:24,900 --> 00:15:22,960

thanks for doing this what is your

352

00:15:27,890 --> 00:15:24,910

presentation going to be about well it's

353

00:15:32,610 --> 00:15:27,900

called the fiction of memory and it's

354

00:15:35,130 --> 00:15:32,620

it's about well research that I and

355

00:15:37,080 --> 00:15:35,140

other psychologists have done on how it

356

00:15:39,480 --> 00:15:37,090

is that people come to believe and

357

00:15:43,620 --> 00:15:39,490

remember that they did things or saw

358

00:15:45,720 --> 00:15:43,630

things that they didn't do or see how do

359

00:15:47,790 --> 00:15:45,730

people develop false beliefs and false

360

00:15:50,280 --> 00:15:47,800

memories so does that include when

361

00:15:52,500 --> 00:15:50,290

someone may be miss remember something

362

00:15:54,260 --> 00:15:52,510

so that actually was an event but they

363

00:15:58,080 --> 00:15:54,270

don't remember it properly

364

00:16:00,240 --> 00:15:58,090

well that's part of the work and many of

365

00:16:03,000 --> 00:16:00,250

the experiments that I've done show how

366

00:16:05,640 --> 00:16:03,010

easy it is to change people's memory for

367

00:16:08,130 --> 00:16:05,650

an event that they actually did see but

368

00:16:11,100 --> 00:16:08,140

what's even more stunning is when we can

369

00:16:13,260 --> 00:16:11,110

plant an entire event in the minds of

370

00:16:15,360 --> 00:16:13,270

people for something that didn't happen

371

00:16:17,850 --> 00:16:15,370

I mean give me an example well you know

372

00:16:19,620 --> 00:16:17,860

make them believe that they were lost in

373

00:16:21,690 --> 00:16:19,630

a shopping mall and frightened and

374

00:16:24,690 --> 00:16:21,700

crying or that they were attacked by an

375

00:16:26,260 --> 00:16:24,700

animal or they witnessed a person being

376

00:16:28,120 --> 00:16:26,270

demonically possessed

377

00:16:30,490 --> 00:16:28,130

when that never happened at all but it

378

00:16:32,170 --> 00:16:30,500

never happened that's amazing and and

379

00:16:34,690 --> 00:16:32,180

that you know that's really amazing

380

00:16:36,760 --> 00:16:34,700

because people I know on even mundane

381

00:16:38,320 --> 00:16:36,770

things don't think they challenged me

382

00:16:39,910 --> 00:16:38,330

it's like no I cannot be wrong I

383

00:16:41,620 --> 00:16:39,920

remembered that exactly and you cannot

384

00:16:43,120 --> 00:16:41,630

convince me otherwise and it's a little

385

00:16:44,980 --> 00:16:43,130

thing but this is like a huge thing and

386

00:16:47,440 --> 00:16:44,990

people make it up in their minds these

387

00:16:50,500 --> 00:16:47,450

are huge huge what we call rich false

388

00:16:53,410 --> 00:16:50,510

memories Wow how did you get involved in

389

00:16:57,570 --> 00:16:53,420

this kind of research I was a graduate

390

00:17:00,340 --> 00:16:57,580

student studying psychology and I

391

00:17:03,490 --> 00:17:00,350

started to do some work with a professor

392

00:17:06,670 --> 00:17:03,500

on memory just really very theoretical

393

00:17:10,810 --> 00:17:06,680

kinds of memory work and then after I

394

00:17:13,660 --> 00:17:10,820

got my PhD I wanted to study memory for

395

00:17:16,090 --> 00:17:13,670

something that really mattered like the

396

00:17:19,329 --> 00:17:16,100

memory of people for crimes accidents

397

00:17:22,090 --> 00:17:19,339

and other events that would be important

398

00:17:25,930 --> 00:17:22,100

to the legal system and began to design

399

00:17:28,570 --> 00:17:25,940

experiments and now I've got 40 years of

400

00:17:30,280 --> 00:17:28,580

having done them well fascinating and so

401  
00:17:34,300 --> 00:17:30,290  
alright so besides the memory issue what

402  
00:17:36,430 --> 00:17:34,310  
other aspect of cell say you know

403  
00:17:41,280 --> 00:17:36,440  
pushing back on pseudoscience or altmed

404  
00:17:43,930 --> 00:17:41,290  
and what interests you mostly mostly I'm

405  
00:17:47,860 --> 00:17:43,940  
scientist who studies memory and while

406  
00:17:51,460 --> 00:17:47,870  
memory can go awry and my plate is full

407  
00:17:53,470 --> 00:17:51,470  
just about problems in the world thank

408  
00:17:57,370 --> 00:17:53,480  
you much for the time okay sure forward

409  
00:17:59,740 --> 00:17:57,380  
to hearing you talk alright I just came

410  
00:18:01,480 --> 00:17:59,750  
from my first workshop here which was

411  
00:18:03,610 --> 00:18:01,490  
the investigators which was a joint

412  
00:18:05,560 --> 00:18:03,620  
presentation by Kenny Biddle and the

413  
00:18:06,790 --> 00:18:05,570

gentleman standing in front of me and

414

00:18:09,070 --> 00:18:06,800

please introduce yourself

415

00:18:12,610 --> 00:18:09,080

I'm Jim Underdown executive director of

416

00:18:15,040 --> 00:18:12,620

the Center for inquiry West and chair of

417

00:18:15,850 --> 00:18:15,050

the Center for inquiry investigations

418

00:18:18,100 --> 00:18:15,860

group ah

419

00:18:21,390 --> 00:18:18,110

and what was your presentation about

420

00:18:24,910 --> 00:18:21,400

workshop yeah just techniques of

421

00:18:28,570 --> 00:18:24,920

investigations that we've had over the

422

00:18:30,790 --> 00:18:28,580

years and bringing up examples trying to

423

00:18:32,710 --> 00:18:30,800

highlight some of those techniques okay

424

00:18:35,110 --> 00:18:32,720

and you split the time with Kenny and

425

00:18:36,730 --> 00:18:35,120

you guys talked about slightly different

426

00:18:37,930 --> 00:18:36,740

things and then we had two different

427

00:18:39,549 --> 00:18:37,940

exercises at

428

00:18:41,470 --> 00:18:39,559

you want to describe what yours was I

429

00:18:44,980 --> 00:18:41,480

found that interesting I participated in

430

00:18:47,019 --> 00:18:44,990

that yeah the case we did that people

431

00:18:50,460 --> 00:18:47,029

would try to solve was something called

432

00:18:55,389 --> 00:18:50,470

the Charlotte angel which is a real case

433

00:19:00,669 --> 00:18:55,399

involving a light based angel that shone

434

00:19:02,639 --> 00:19:00,679

upon a wall in a intensive care unit at

435

00:19:06,039 --> 00:19:02,649

a hospital in Charlotte North Carolina

436

00:19:09,299 --> 00:19:06,049

immediately after a sick young girl was

437

00:19:12,310 --> 00:19:09,309

taken off her respirator and she

438

00:19:16,450 --> 00:19:12,320

apparently improved right away after the

439

00:19:19,269 --> 00:19:16,460

angel was spotted and her mother and

440

00:19:22,990 --> 00:19:19,279

some of the nurses on staff attributed

441

00:19:26,019 --> 00:19:23,000

her improved health to the presence of

442

00:19:27,759 --> 00:19:26,029

the angel alleged angel and so then as a

443

00:19:29,590 --> 00:19:27,769

participant in this what we did was

444

00:19:31,419 --> 00:19:29,600

there were three supposed witnesses so I

445

00:19:32,980 --> 00:19:31,429

guess we're using testimony that was

446

00:19:34,210 --> 00:19:32,990

recorded somewhere and we were able to

447

00:19:35,590 --> 00:19:34,220

ask them questions that was quite

448

00:19:38,080 --> 00:19:35,600

fascinating how did you prep those

449

00:19:41,379 --> 00:19:38,090

people I was on a show called miracle

450

00:19:43,570 --> 00:19:41,389

detective and they we actually

451

00:19:46,930 --> 00:19:43,580

investigated this case so I looked at

452

00:19:49,180 --> 00:19:46,940

some of that old footage and got some of

453

00:19:52,029 --> 00:19:49,190

the actual testimonies from the mother

454

00:19:55,060 --> 00:19:52,039

the real mother and one of the nurses

455

00:19:57,519 --> 00:19:55,070

who was involved and then we created the

456

00:19:59,529 --> 00:19:57,529

third witness just based so the hospital

457

00:20:02,529 --> 00:19:59,539

admin person a hospital admin so you

458

00:20:04,149 --> 00:20:02,539

guys would have someone to go to to ask

459

00:20:05,560 --> 00:20:04,159

about the setup of the hallway and all

460

00:20:07,090 --> 00:20:05,570

that no I thought was clever that when

461

00:20:08,799 --> 00:20:07,100

you ask the sort of wrong category

462

00:20:09,789 --> 00:20:08,809

question to a person they would say no I

463

00:20:11,710 --> 00:20:09,799

don't know think about that talk to the

464

00:20:12,940 --> 00:20:11,720

other person yeah yeah and that's like

465

00:20:14,769 --> 00:20:12,950

real life if you were going to talk to

466

00:20:16,960 --> 00:20:14,779

the real people involved yeah right I

467

00:20:18,730 --> 00:20:16,970

mean ask any cop or any lawyer asking

468

00:20:21,249 --> 00:20:18,740

the right questions is a huge part of

469

00:20:23,919 --> 00:20:21,259

their jobs all right so that I had I had

470

00:20:26,110 --> 00:20:23,929

fun myself and learned a lot and so I'm

471

00:20:29,259 --> 00:20:26,120

asking this everybody else also who you

472

00:20:33,340 --> 00:20:29,269

also most interested in seeing present

473

00:20:36,700 --> 00:20:33,350

at this conference boy it's a long list

474

00:20:40,060 --> 00:20:36,710

Brian green I'm a big fan of Elizabeth

475

00:20:45,369 --> 00:20:40,070

Loftus as work but there are a few

476

00:20:47,200 --> 00:20:45,379

things that that a few presentations of

477

00:20:48,070 --> 00:20:47,210

people that I don't know that I think

478

00:20:50,230 --> 00:20:48,080

might be

479

00:20:52,330 --> 00:20:50,240

interesting so it's gonna be a good

480

00:20:54,130 --> 00:20:52,340

weekend yeah it's gonna be fantastic I'm

481

00:20:54,549 --> 00:20:54,140

glad to be here okay thank you very much

482

00:20:59,110 --> 00:20:54,559

Jim

483

00:21:01,659 --> 00:20:59,120

thank you wandering the halls of saikhan

484

00:21:04,330 --> 00:21:01,669

again and I ran into a featured speaker

485

00:21:05,620 --> 00:21:04,340

from yesterday's lineup and she happens

486

00:21:07,659 --> 00:21:05,630

to also be a member of the gorilla

487

00:21:10,389 --> 00:21:07,669

skeptics team and she did a presentation

488

00:21:11,860 --> 00:21:10,399

on facilitated communications please

489

00:21:14,409 --> 00:21:11,870

introduce yourself and give us an

490

00:21:17,440 --> 00:21:14,419

overview of your talk hi my name is

491

00:21:19,539 --> 00:21:17,450

Janice Boynton and I gave a talk about

492

00:21:22,360 --> 00:21:19,549

facilitated communication which is a

493

00:21:24,419 --> 00:21:22,370

discredited technique that's used with

494

00:21:27,820 --> 00:21:24,429

people with severe communication

495

00:21:31,389 --> 00:21:27,830

difficulties unfortunately even though

496

00:21:34,810 --> 00:21:31,399

it was debunked in around 1994-95 it's

497

00:21:37,029 --> 00:21:34,820

still being used at universities and

498

00:21:38,980 --> 00:21:37,039

colleges and promoted as a valid

499

00:21:41,590 --> 00:21:38,990

technique even though it isn't valid

500

00:21:45,399 --> 00:21:41,600

technique so the talk was kind of a

501  
00:21:50,409 --> 00:21:45,409  
history short history about f.c and also

502  
00:21:52,149 --> 00:21:50,419  
some thoughts about why it still

503  
00:21:54,279 --> 00:21:52,159  
continues to you know the like

504  
00:21:56,200 --> 00:21:54,289  
psychology behind it you know and the

505  
00:21:58,259 --> 00:21:56,210  
thing that personally fascinated me and

506  
00:22:00,580 --> 00:21:58,269  
I knew this before is that you're

507  
00:22:03,460 --> 00:22:00,590  
personally involved with this yeah I

508  
00:22:06,700 --> 00:22:03,470  
became a facilitator f.c was introduced

509  
00:22:10,029 --> 00:22:06,710  
in the United States around 1990 I

510  
00:22:13,240 --> 00:22:10,039  
became involved with it in 1992 it was

511  
00:22:15,190 --> 00:22:13,250  
still kind of in the spreading across

512  
00:22:17,649 --> 00:22:15,200  
the United States stage so people were

513  
00:22:21,070 --> 00:22:17,659

pretty enthusiastic about it the the

514

00:22:22,779 --> 00:22:21,080

evidence-based research hadn't quite

515

00:22:26,129 --> 00:22:22,789

developed to the point that it has now

516

00:22:30,220 --> 00:22:26,139

and yeah I became involved with it and

517

00:22:32,440 --> 00:22:30,230

unfortunately in my situation it turned

518

00:22:36,399 --> 00:22:32,450

into a situation where we needed to test

519

00:22:38,409 --> 00:22:36,409

the case that I was working on and it

520

00:22:41,409 --> 00:22:38,419

turns out and I learned through

521

00:22:43,640 --> 00:22:41,419

double-blind testing that I was the

522

00:22:46,370 --> 00:22:43,650

author of the FC messages

523

00:22:49,340 --> 00:22:46,380

and the science actually has since then

524

00:22:51,920 --> 00:22:49,350

has backed up my personal experiences at

525

00:22:54,500 --> 00:22:51,930

any time facilitated communication is

526  
00:22:56,360 --> 00:22:54,510  
tested in controlled settings the

527  
00:22:59,600 --> 00:22:56,370  
facilitators are always the ones not

528  
00:23:01,370 --> 00:22:59,610  
only influencing the messages coming out

529  
00:23:02,960 --> 00:23:01,380  
through facilitated communication but

530  
00:23:04,760 --> 00:23:02,970  
they're actually controlling it so

531  
00:23:07,310 --> 00:23:04,770  
what's so what's the reaction been to

532  
00:23:10,160 --> 00:23:07,320  
people who still do facilitated

533  
00:23:13,430 --> 00:23:10,170  
communications well they they don't

534  
00:23:15,080 --> 00:23:13,440  
believe in the evidence-based testing in

535  
00:23:17,900 --> 00:23:15,090  
fact you're not even supposed to test it

536  
00:23:20,870 --> 00:23:17,910  
they consider it a an affront to people

537  
00:23:24,230 --> 00:23:20,880  
with disabilities to actually test the

538  
00:23:26,600 --> 00:23:24,240

messages so the reasoning that they use

539

00:23:29,450 --> 00:23:26,610

in their in their their own studies it

540

00:23:32,420 --> 00:23:29,460

kind of runs along the lines of FC works

541

00:23:35,510 --> 00:23:32,430

because people saying FC say it works

542

00:23:37,010 --> 00:23:35,520

are using FC say it works so a little

543

00:23:38,660 --> 00:23:37,020

bit of circular reasoning that's so much

544

00:23:40,160 --> 00:23:38,670

like other things like that that that

545

00:23:42,260 --> 00:23:40,170

can't possibly work like homeopathy for

546

00:23:43,850 --> 00:23:42,270

example sure people who swear it works

547

00:23:45,940 --> 00:23:43,860

and since they swear it works it has to

548

00:23:50,360 --> 00:23:45,950

work yeah I happen to believe that

549

00:23:52,880 --> 00:23:50,370

because because the evidence hasn't

550

00:23:54,380 --> 00:23:52,890

changed people's minds about facilitated

551  
00:23:57,800 --> 00:23:54,390  
communication I think it's more of a

552  
00:24:00,590 --> 00:23:57,810  
belief system than actual it's not a

553  
00:24:01,940 --> 00:24:00,600  
communication technique yeah but as I

554  
00:24:03,560 --> 00:24:01,950  
understand that there are actually

555  
00:24:06,050 --> 00:24:03,570  
agencies which have come out publicly

556  
00:24:08,900 --> 00:24:06,060  
against it now right sure there's over

557  
00:24:10,760 --> 00:24:08,910  
20 major organizations like American

558  
00:24:13,760 --> 00:24:10,770  
speech language and Hearing Association

559  
00:24:17,000 --> 00:24:13,770  
in several different countries not just

560  
00:24:19,340 --> 00:24:17,010  
America but Canada and Australia a lot

561  
00:24:23,770 --> 00:24:19,350  
of the behavior analysis organizations

562  
00:24:25,820 --> 00:24:23,780  
have opposition policies as well as the

563  
00:24:27,710 --> 00:24:25,830

organizations like the International

564

00:24:31,520 --> 00:24:27,720

Society for augmentative and alternative

565

00:24:33,740 --> 00:24:31,530

communication there's also I want to

566

00:24:36,830 --> 00:24:33,750

just highlight one

567

00:24:39,259 --> 00:24:36,840

it's called Lake Region Community

568

00:24:41,060 --> 00:24:39,269

College and they have a policy opposing

569

00:24:44,210 --> 00:24:41,070

facilitated communication for people

570

00:24:46,070 --> 00:24:44,220

coming into their college to take

571

00:24:47,570 --> 00:24:46,080

classes because they can't tell the

572

00:24:49,430 --> 00:24:47,580

difference they can't tell who's

573

00:24:51,320 --> 00:24:49,440

actually doing the coursework the person

574

00:24:54,680 --> 00:24:51,330

with disabilities or the facilitator so

575

00:24:56,539 --> 00:24:54,690

they allow people with this and

576

00:24:58,580 --> 00:24:56,549

encourage people with disabilities to

577

00:25:00,409 --> 00:24:58,590

come into the classrooms but they need

578

00:25:02,690 --> 00:25:00,419

to be using valid augmentative and

579

00:25:04,340 --> 00:25:02,700

alternative communication devices and

580

00:25:07,039 --> 00:25:04,350

techniques that show that they are

581

00:25:08,480 --> 00:25:07,049

independently doing a class work and if

582

00:25:10,220 --> 00:25:08,490

I recall right from your presentation

583

00:25:12,259 --> 00:25:10,230

you mentioned Syracuse University as

584

00:25:14,869 --> 00:25:12,269

people still saying this is real

585

00:25:16,940 --> 00:25:14,879

yes um Syracuse University is kind of on

586

00:25:19,820 --> 00:25:16,950

ground zero it's where a facilitated

587

00:25:22,249 --> 00:25:19,830

communication started in the in 1990 and

588

00:25:24,980 --> 00:25:22,259

it continues to promote facilitated

589

00:25:27,409 --> 00:25:24,990

communication today despite all the

590

00:25:30,850 --> 00:25:27,419

evidence and that's an interesting case

591

00:25:34,730 --> 00:25:30,860

because so the communication Sciences

592

00:25:37,999 --> 00:25:34,740

Department in Syracuse University has an

593

00:25:39,680 --> 00:25:38,009

open statement that they do not support

594

00:25:42,619 --> 00:25:39,690

facilitated communication because

595

00:25:46,789 --> 00:25:42,629

they're evidence-based but the Institute

596

00:25:49,129 --> 00:25:46,799

for the Center for community inclusion

597

00:25:51,379 --> 00:25:49,139

and I think that's the name of it is

598

00:25:52,490 --> 00:25:51,389

it's through the Education Department

599

00:25:54,200 --> 00:25:52,500

and they're heavily promoting

600

00:25:56,539 --> 00:25:54,210

facilitated communication of the job

601  
00:25:58,039 --> 00:25:56,549  
very fascinating subject so fascinating

602  
00:26:00,320 --> 00:25:58,049  
the whole the whole conference is great

603  
00:26:04,519 --> 00:26:00,330  
I've really had a good time here so okay

604  
00:26:06,049 --> 00:26:04,529  
thanks for your time well thank you so

605  
00:26:09,200 --> 00:26:06,059  
we just finished the first session of

606  
00:26:11,299 --> 00:26:09,210  
psych on speakers and I ran into a

607  
00:26:13,190 --> 00:26:11,309  
speaker himself and he's speaking

608  
00:26:14,840 --> 00:26:13,200  
tomorrow and you could you please

609  
00:26:17,749 --> 00:26:14,850  
introduce yourself and tell us what your

610  
00:26:20,869 --> 00:26:17,759  
topic is hi I'm Josh Schwartz I'm from

611  
00:26:22,970 --> 00:26:20,879  
Montreal McGill University and I direct

612  
00:26:25,090 --> 00:26:22,980  
the University's office for science and

613  
00:26:27,860 --> 00:26:25,100

society where our mandate is related to

614

00:26:30,560 --> 00:26:27,870

demystify science and separate central

615

00:26:33,150 --> 00:26:30,570

nonsense and my background is chemistry

616

00:26:35,790 --> 00:26:33,160

so I deal a lot with that

617

00:26:38,490 --> 00:26:35,800

and the topic that I'll be addressing is

618

00:26:40,790 --> 00:26:38,500

getting the chemistry right because

619

00:26:43,770 --> 00:26:40,800

there are so many things on the internet

620

00:26:48,120 --> 00:26:43,780

where they get the chemistry wrong and

621

00:26:50,880 --> 00:26:48,130

you know it's obviously we know people

622

00:26:52,860 --> 00:26:50,890

like the food babe etc who are not very

623

00:26:54,360 --> 00:26:52,870

well versed in any aspect of science

624

00:26:57,090 --> 00:26:54,370

they're not surprised that they get

625

00:27:00,060 --> 00:26:57,100

things wrong but it's already yeah but

626

00:27:02,730 --> 00:27:00,070

sometimes you know there are people who

627

00:27:04,650 --> 00:27:02,740

are sort of legitimate scientists who

628

00:27:06,540 --> 00:27:04,660

get things wrong too because they are

629

00:27:08,820 --> 00:27:06,550

outside of the area of their expertise

630

00:27:11,970 --> 00:27:08,830

so you tackle both of those oh yeah we

631

00:27:15,090 --> 00:27:11,980

tackle both of those and we do some hard

632

00:27:17,220 --> 00:27:15,100

science as well you know explaining the

633

00:27:19,560 --> 00:27:17,230

row of chemistry in everyday life and I

634

00:27:21,060 --> 00:27:19,570

focus also a lot of nutrition because

635

00:27:22,440 --> 00:27:21,070

the human body of course is the most

636

00:27:25,800 --> 00:27:22,450

complex machine on the face of the earth

637

00:27:28,680 --> 00:27:25,810

and we put the most complex things that

638

00:27:31,410 --> 00:27:28,690

we call food into it and expect to get

639

00:27:35,130 --> 00:27:31,420

simple solutions but there aren't any so

640

00:27:40,170 --> 00:27:35,140

we deal a lot with that but tomorrow

641

00:27:43,050 --> 00:27:40,180

I'll be taking a look at some issues for

642

00:27:47,090 --> 00:27:43,060

example whether or not heating plastics

643

00:27:50,760 --> 00:27:47,100

and microwave oven releases toxins and

644

00:27:53,430 --> 00:27:50,770

I'm going to address one particular

645

00:27:55,770 --> 00:27:53,440

issue because there's a lot of talk out

646

00:27:57,750 --> 00:27:55,780

there that if you heat plastics in a

647

00:27:59,730 --> 00:27:57,760

microwave oven you get dioxins and

648

00:28:04,320 --> 00:27:59,740

people have heard of the oxidants which

649

00:28:06,120 --> 00:28:04,330

indeed are a problem the tetra chloro

650

00:28:08,610 --> 00:28:06,130

dye benzyl dioxin is probably the most

651  
00:28:09,990 --> 00:28:08,620  
toxic substance ever made although it's

652  
00:28:12,510 --> 00:28:10,000  
never made on purpose it's always a

653  
00:28:14,400 --> 00:28:12,520  
byproduct of some some process however

654  
00:28:16,620 --> 00:28:14,410  
they get the chemistry wrong when they

655  
00:28:19,460 --> 00:28:16,630  
talk about heating plastics and in the

656  
00:28:22,080 --> 00:28:19,470  
microwave because in order to get

657  
00:28:24,120 --> 00:28:22,090  
dioxins you must have chlorine in the

658  
00:28:28,110 --> 00:28:24,130  
environment is the chlorinated compound

659  
00:28:30,270 --> 00:28:28,120  
okay and where they where they basically

660  
00:28:31,820 --> 00:28:30,280  
launch their attacks from is the

661  
00:28:34,500 --> 00:28:31,830  
knowledge that if you incinerate

662  
00:28:36,570 --> 00:28:34,510  
polyvinyl chloride which is a very

663  
00:28:39,330 --> 00:28:36,580

commonly used mastic you can generate

664

00:28:40,170 --> 00:28:39,340

the oxidants but the vessels that we use

665

00:28:42,150 --> 00:28:40,180

in microwave

666

00:28:44,880 --> 00:28:42,160

are not made of PVC they're made of

667

00:28:46,380 --> 00:28:44,890

polyethylene or polypropylene there's no

668

00:28:49,500 --> 00:28:46,390

chlorine in sight so they cannot

669

00:28:51,420 --> 00:28:49,510

possibly produce dioxins furthermore the

670

00:28:53,850 --> 00:28:51,430

microwave oven is not an incinerator

671

00:28:55,590 --> 00:28:53,860

right right okay make sounds cool I'm

672

00:28:57,840 --> 00:28:55,600

looking forward to that and McGill is

673

00:29:00,060 --> 00:28:57,850

well represented at this conference

674

00:29:03,000 --> 00:29:00,070

Jonathan Jerry Jonathan Jerry works for

675

00:29:05,280 --> 00:29:03,010

me and he's going to be talking about

676

00:29:07,290 --> 00:29:05,290

some of the victories that we've had in

677

00:29:09,930 --> 00:29:07,300

fighting through the science very cool

678

00:29:12,090 --> 00:29:09,940

looking forward to that and what speaker

679

00:29:14,460 --> 00:29:12,100

besides Jonathan Ari Ari are you most

680

00:29:18,150 --> 00:29:14,470

interested in hearing Manchester and Jen

681

00:29:22,050 --> 00:29:18,160

gondry I followed her and she's very

682

00:29:24,360 --> 00:29:22,060

adept at getting her points across and I

683

00:29:26,360 --> 00:29:24,370

followed the climate change arguments or

684

00:29:30,620 --> 00:29:26,370

are you coming to the luncheon with not

685

00:29:34,260 --> 00:29:30,630

going to that also comes a luncheon and

686

00:29:37,950 --> 00:29:34,270

I'm very interested in hearing Mikkelson

687

00:29:39,270 --> 00:29:37,960

the gentleman who started Snopes oh yes

688

00:29:42,150 --> 00:29:39,280

that should be fair there's all the good

689

00:29:44,280 --> 00:29:42,160

stuff and also I just had the chance

690

00:29:48,090 --> 00:29:44,290

walking in the Hall of meeting royalty

691

00:29:50,400 --> 00:29:48,100

because I met James Randi oh yes and

692

00:29:53,580 --> 00:29:50,410

I've known Randy admired him for a very

693

00:29:56,340 --> 00:29:53,590

long time and ten years ago he was our

694

00:29:59,280 --> 00:29:56,350

guest in Montreal for symposium that we

695

00:30:02,850 --> 00:29:59,290

do annually them tortilla public science

696

00:30:05,010 --> 00:30:02,860

symposium and so I've met him many times

697

00:30:08,010 --> 00:30:05,020

since that time and it's always a thrill

698

00:30:10,200 --> 00:30:08,020

because I mean he really is the god of

699

00:30:11,820 --> 00:30:10,210

skepticism that's amazing to see him

700

00:30:13,740 --> 00:30:11,830

here yeah we found that just today

701  
00:30:15,270 --> 00:30:13,750  
before we got here that he was coming I

702  
00:30:17,220 --> 00:30:15,280  
don't know if his last-minute plans he

703  
00:30:18,480 --> 00:30:17,230  
wasn't you know sure himself or they

704  
00:30:21,840 --> 00:30:18,490  
just kept it under wraps but that was a

705  
00:30:23,370 --> 00:30:21,850  
quite a nice thing to see him okay okay

706  
00:30:28,910 --> 00:30:23,380  
thank you very much looking forward to

707  
00:30:33,960 --> 00:30:31,500  
that was part two of my interview series

708  
00:30:41,180 --> 00:30:33,970  
from saikhan 2019 joining me here on the

709  
00:30:51,100 --> 00:30:48,570  
[Music]

710  
00:30:54,550 --> 00:30:51,110  
now here are some announcements from the

711  
00:30:58,870 --> 00:30:54,560  
skeptical world things you can go and

712  
00:31:01,390 --> 00:30:58,880  
see and do the Bay Area skeptics inform

713  
00:31:03,660 --> 00:31:01,400

us that dr. eugenie Scott will be

714

00:31:06,090 --> 00:31:03,670

talking at the San Francisco

715

00:31:08,950 --> 00:31:06,100

Exploratorium after dark

716

00:31:11,710 --> 00:31:08,960

now the Exploratorium is a wonderful

717

00:31:15,100 --> 00:31:11,720

interactive science museum located on

718

00:31:17,860 --> 00:31:15,110

pier 15 in bako Darrow this is Thursday

719

00:31:20,470 --> 00:31:17,870

the 7th of November Thursday night and

720

00:31:23,560 --> 00:31:20,480

that's from 6:00 p.m. until 10:00 p.m.

721

00:31:26,650 --> 00:31:23,570

the theme for the evening is a skeptical

722

00:31:29,320 --> 00:31:26,660

one matters of fact how can we know the

723

00:31:31,300 --> 00:31:29,330

truth two facts matter what

724

00:31:34,330 --> 00:31:31,310

distinguishes justified belief from

725

00:31:36,090 --> 00:31:34,340

opinion and why do our personal biases

726

00:31:38,590 --> 00:31:36,100

keep us from seeing the whole picture

727

00:31:41,350 --> 00:31:38,600

join us to learn more about the anchors

728

00:31:44,620 --> 00:31:41,360

of scrupulous science and digital data

729

00:31:47,050 --> 00:31:44,630

and how they can be exploited and the

730

00:31:49,870 --> 00:31:47,060

tools to find the facts for yourself

731

00:31:51,160 --> 00:31:49,880

Bay Area skeptics president dr. Eugene

732

00:31:55,720 --> 00:31:51,170

EC Scott will be giving a presentation

733

00:31:57,640 --> 00:31:55,730

on why do people reject good science and

734

00:32:00,400 --> 00:31:57,650

the Bay Area skeptics will have tables

735

00:32:03,130 --> 00:32:00,410

demonstrating how to think about and

736

00:32:06,160 --> 00:32:03,140

analyze pseudo-scientific claims in

737

00:32:08,770 --> 00:32:06,170

addition there are the usual hundreds of

738

00:32:11,050 --> 00:32:08,780

interactive Exploratorium exhibits for

739

00:32:14,820 --> 00:32:11,060

you to play with it will be a fun-filled

740

00:32:17,500 --> 00:32:14,830

evening for adults alcohol is available

741

00:32:19,870 --> 00:32:17,510

once again that's Thursday the 7th of

742

00:32:23,590 --> 00:32:19,880

November and I will add a link in this

743

00:32:25,420 --> 00:32:23,600

week's show notes and the Canberra

744

00:32:28,600 --> 00:32:25,430

skeptics right here in Australia are

745

00:32:31,510 --> 00:32:28,610

presenting a talk effective altruism how

746

00:32:33,760 --> 00:32:31,520

to do the most good and that's Tuesday

747

00:32:37,000 --> 00:32:33,770

night the 12th of November 6:00 p.m. to

748

00:32:39,220 --> 00:32:37,010

7:30 p.m. at the Belconnen community

749

00:32:41,560 --> 00:32:39,230

service which is in Chandler Street

750

00:32:43,810 --> 00:32:41,570

Belconnen the effective altruism is a

751  
00:32:46,720 --> 00:32:43,820  
philosophical and social movement that

752  
00:32:48,940 --> 00:32:46,730  
uses evidence and reasoning to determine

753  
00:32:51,280 --> 00:32:48,950  
the most effective ways to benefit

754  
00:32:52,690 --> 00:32:51,290  
others it sounds like a fascinating talk

755  
00:32:55,299 --> 00:32:52,700  
I wish I could go to all these talks

756  
00:32:58,389 --> 00:32:55,309  
anyway dinner will follow the lecture

757  
00:33:00,580 --> 00:32:58,399  
to RSVP for the dinner please email the

758  
00:33:04,149 --> 00:33:00,590  
Canberra skeptics Canberra skeptics at

759  
00:33:07,269 --> 00:33:04,159  
gmail.com and for more information head

760  
00:33:09,700 --> 00:33:07,279  
to WWE and bruh skeptics org

761  
00:33:28,720 --> 00:33:09,710  
or follow the link in this week's show

762  
00:33:30,789 --> 00:33:28,730  
notes hi my name is Tim Mendham I'm the

763  
00:33:32,529 --> 00:33:30,799

executive officer of Australian skeptics

764

00:33:34,720 --> 00:33:32,539

and I'm also the editor of our magazine

765

00:33:36,730 --> 00:33:34,730

the skeptic and I'd like to cover

766

00:33:38,889 --> 00:33:36,740

another little article that's published

767

00:33:41,710 --> 00:33:38,899

in the magazine this one is from our

768

00:33:43,409 --> 00:33:41,720

section we call readers in digestible it

769

00:33:45,909 --> 00:33:43,419

basically looks at a whole range of

770

00:33:48,519 --> 00:33:45,919

websites publications that sort of thing

771

00:33:50,859 --> 00:33:48,529

from either the paranormal end of the

772

00:33:53,799 --> 00:33:50,869

scale or from some more serious

773

00:33:56,230 --> 00:33:53,809

skeptical ones this one looks at geeks

774

00:33:58,869 --> 00:33:56,240

gamers nerds and kids and came out of

775

00:34:02,210 --> 00:33:58,879

the sceptic published in March 2019

776

00:34:06,750 --> 00:34:02,220

which was vol 39 number one

777

00:34:13,030 --> 00:34:09,369

in an article in The Guardian published

778

00:34:15,369 --> 00:34:13,040

in November 2012 Debora Hyde who was

779

00:34:17,800 --> 00:34:15,379

then the editor of the UK skeptic

780

00:34:19,930 --> 00:34:17,810

magazine on 48 the magazine is no more

781

00:34:22,149 --> 00:34:19,940

although there's a website she described

782

00:34:23,859 --> 00:34:22,159

the rise of skepticism specifically

783

00:34:26,980 --> 00:34:23,869

looking at the proliferation of major

784

00:34:30,129 --> 00:34:26,990

skeptical events blogs podcasts vodcasts

785

00:34:32,980 --> 00:34:30,139

and sundry other casts what is driving

786

00:34:35,560 --> 00:34:32,990

this change asked the nerd factor is

787

00:34:37,629 --> 00:34:35,570

undoubtedly in the mix previously a

788

00:34:40,659 --> 00:34:37,639

derisive term and somewhat like the

789

00:34:43,300 --> 00:34:40,669

other n-word and queer it has been

790

00:34:46,810 --> 00:34:43,310

reclaimed by its former victims and is

791

00:34:48,909 --> 00:34:46,820

now regularly wielded with pride I sense

792

00:34:50,950 --> 00:34:48,919

that this rise in social status of the

793

00:34:54,070 --> 00:34:50,960

technically gifted and sartorial is

794

00:34:58,050 --> 00:34:54,080

socially impaired is probably related to

795

00:35:01,660 --> 00:34:58,060

the growth of the IT sector nodi is cool

796

00:35:04,120 --> 00:35:01,670

do you remember the old TV show about

797

00:35:06,940 --> 00:35:04,130

radio hams and chemistry students me

798

00:35:09,400 --> 00:35:06,950

neither and now we have IT Crowd and Big

799

00:35:11,740 --> 00:35:09,410

Bang Theory and Brian Cox notice how

800

00:35:14,800 --> 00:35:11,750

clouds and those are cool so that's

801  
00:35:16,210 --> 00:35:14,810  
that's her words it is the case that are

802  
00:35:18,040 --> 00:35:16,220  
perhaps surprising proportion of

803  
00:35:21,250 --> 00:35:18,050  
skeptics and especially young ones work

804  
00:35:22,750 --> 00:35:21,260  
in IT so there is a strong nerd factor

805  
00:35:25,180 --> 00:35:22,760  
in many skeptical meetings and

806  
00:35:27,760 --> 00:35:25,190  
discussions perhaps skeptical meetings

807  
00:35:29,560 --> 00:35:27,770  
fulfill a social need that nerds and

808  
00:35:31,990 --> 00:35:29,570  
geeks find difficult to fulfill as

809  
00:35:36,940 --> 00:35:32,000  
elsewhere except a course through online

810  
00:35:39,130 --> 00:35:36,950  
multiplayer gaming you know 2010 skeptic

811  
00:35:42,370 --> 00:35:39,140  
blog entry titled why and nerds so

812  
00:35:43,870 --> 00:35:42,380  
unpopular dr. Steve novella was a

813  
00:35:46,150 --> 00:35:43,880

founder of the skeptics guide to the

814

00:35:48,520 --> 00:35:46,160

universe says that culture is slowly

815

00:35:52,330 --> 00:35:48,530

moving in the direction of valuing

816

00:35:54,820 --> 00:35:52,340

smarts even nerdiness he says Bill Gates

817

00:35:57,670 --> 00:35:54,830

in his ilk and to blame for this to some

818

00:36:00,250 --> 00:35:57,680

degree we now celebrate the alpha nerd

819

00:36:02,620 --> 00:36:00,260

Steve says kids see wealthy powerful

820

00:36:03,420 --> 00:36:02,630

nerds with their attractive mates and I

821

00:36:06,130 --> 00:36:03,430

get the message

822

00:36:08,609 --> 00:36:06,140

computers have done this once the sole

823

00:36:11,530 --> 00:36:08,619

domain of nerds they are now chic

824

00:36:13,930 --> 00:36:11,540

chicness may however only apply in

825

00:36:15,760 --> 00:36:13,940

higher education and beyond nerds in

826

00:36:18,760 --> 00:36:15,770

high school are often avoided if not

827

00:36:19,780 --> 00:36:18,770

picked on Alexandra Robbins was the

828

00:36:21,430 --> 00:36:19,790

author of the geek

829

00:36:24,430 --> 00:36:21,440

shall inherit the earth which came out

830

00:36:26,410 --> 00:36:24,440

in 2011 says that many of the

831

00:36:28,690 --> 00:36:26,420

differences that cause a student to be

832

00:36:32,110 --> 00:36:28,700

excluded in school are the identical

833

00:36:35,470 --> 00:36:32,120

traits or real-world skills that others

834

00:36:37,510 --> 00:36:35,480

will value love respect or find

835

00:36:39,280 --> 00:36:37,520

compelling about that person in

836

00:36:42,010 --> 00:36:39,290

adulthood and outside of the school

837

00:36:43,450 --> 00:36:42,020

setting so it's bad when you're young is

838

00:36:47,170 --> 00:36:43,460

not so bad when you're older

839

00:36:50,560 --> 00:36:47,180

in 2010 Jules Evans on his philosophy

840

00:36:52,960 --> 00:36:50,570

for life website blog wrote that the

841

00:36:55,900 --> 00:36:52,970

rise of skeptics has gone hand in hand

842

00:36:58,330 --> 00:36:55,910

with the rise of geek culture like

843

00:37:01,270 --> 00:36:58,340

superhero comics sword & Sworcery

844

00:37:03,490 --> 00:37:01,280

fantasy and science fiction many

845

00:37:06,070 --> 00:37:03,500

skeptics are also science fiction

846

00:37:09,940 --> 00:37:06,080

fantasy and superhero nerds who will

847

00:37:12,160 --> 00:37:09,950

attend both tan and comic-con indeed

848

00:37:15,430 --> 00:37:12,170

some comic conventions now hold skeptic

849

00:37:18,670 --> 00:37:15,440

side events you could speculate that the

850

00:37:21,280 --> 00:37:18,680

skeptics have rejected organized

851  
00:37:24,100 --> 00:37:21,290  
religion instead they construct their

852  
00:37:25,540 --> 00:37:24,110  
own just their own disposable religion

853  
00:37:27,850 --> 00:37:25,550  
out of Batman

854  
00:37:32,440 --> 00:37:27,860  
Gandalf mr. Spock and other pop culture

855  
00:37:35,200 --> 00:37:32,450  
icons superhero movies which are now

856  
00:37:37,570 --> 00:37:35,210  
mainstream blockbusters often tell the

857  
00:37:40,120 --> 00:37:37,580  
story of the rise of the geek from nerdy

858  
00:37:42,190 --> 00:37:40,130  
outsider to all-powerful dominant male

859  
00:37:44,650 --> 00:37:42,200  
you just happen to think of Superman or

860  
00:37:47,560 --> 00:37:44,660  
Iron Man or the Hulk to see examples of

861  
00:37:51,010 --> 00:37:47,570  
them it is the story of the scientific

862  
00:37:53,940 --> 00:37:51,020  
intelligentsia their own rise to power

863  
00:37:59,680 --> 00:37:53,950

since world war ii turned into myth and

864

00:38:01,780 --> 00:37:59,690

endlessly resold and retold so that's

865

00:38:03,880 --> 00:38:01,790

joules talking about that one but what

866

00:38:06,520 --> 00:38:03,890

is out there online of a skeptical

867

00:38:09,010 --> 00:38:06,530

nature specifically for geeks gamers

868

00:38:11,980 --> 00:38:09,020

nerds and those kids who look forward to

869

00:38:14,530 --> 00:38:11,990

joining that fraternity and it's largely

870

00:38:17,140 --> 00:38:14,540

seen as a male group though the mix is

871

00:38:19,690 --> 00:38:17,150

definitely changing the answer is it can

872

00:38:22,720 --> 00:38:19,700

be difficult to find geek communities

873

00:38:24,070 --> 00:38:22,730

can be very insular close-knit which is

874

00:38:27,070 --> 00:38:24,080

understandable considering their

875

00:38:29,230 --> 00:38:27,080

experience in younger years you may need

876

00:38:31,540 --> 00:38:29,240

to be on the geek grapevine to pick out

877

00:38:33,430 --> 00:38:31,550

the best places as Amy Whitcroft

878

00:38:35,710 --> 00:38:33,440

self-professed nerd

879

00:38:38,589 --> 00:38:35,720

founder of nerd night social events in

880

00:38:41,099 --> 00:38:38,599

Wellington New Zealand she told in New

881

00:38:43,809 --> 00:38:41,109

Zealand skeptics conference in 2013

882

00:38:45,579 --> 00:38:43,819

forming communities around interests and

883

00:38:48,250 --> 00:38:45,589

beliefs is pretty common behavior

884

00:38:50,020 --> 00:38:48,260

amongst people nerds geeks whatever you

885

00:38:52,450 --> 00:38:50,030

want to call them and no different and

886

00:38:55,650 --> 00:38:52,460

in fact they tend to do so very

887

00:38:59,200 --> 00:38:55,660

enthusiastically the problem is

888

00:39:01,720 --> 00:38:59,210

information on them was slight she says

889

00:39:03,400 --> 00:39:01,730

I had to look for data about them about

890

00:39:06,940 --> 00:39:03,410

this movement and well it's not really

891

00:39:11,290 --> 00:39:06,950

there but I do know that nerds and no

892

00:39:12,880 --> 00:39:11,300

communities are everywhere firstly I'd

893

00:39:16,030 --> 00:39:12,890

like to put out a call to all the

894

00:39:19,359 --> 00:39:16,040

listeners to this podcast to let me know

895

00:39:23,380 --> 00:39:19,369

your favorite geek or nerd site that

896

00:39:25,240 --> 00:39:23,390

also features scientific skepticism one

897

00:39:29,890 --> 00:39:25,250

that does crop up and that is worth

898

00:39:33,300 --> 00:39:29,900

looking at is one called a I teepee now

899

00:39:36,730 --> 00:39:33,310

the cliched image of an avid video gamer

900

00:39:38,589 --> 00:39:36,740

is an adolescent male tucked away in the

901  
00:39:41,050 --> 00:39:38,599  
room tapping furiously at their keyboard

902  
00:39:44,500 --> 00:39:41,060  
in actuality the average age of a gamer

903  
00:39:47,280 --> 00:39:44,510  
is definitely adult some sources say

904  
00:39:50,559 --> 00:39:47,290  
about 35 years old with almost equal

905  
00:39:54,460 --> 00:39:50,569  
share between male and female whether

906  
00:39:56,920 --> 00:39:54,470  
women tend to use mobile games estimates

907  
00:39:59,650 --> 00:39:56,930  
of the size of the gaming markets very

908  
00:40:05,109 --> 00:39:59,660  
the one source puts the current figure at

909  
00:40:07,270 --> 00:40:05,119  
a high of us 136 billion dollars now

910  
00:40:10,300 --> 00:40:07,280  
this a bit more modest Sanks only

911  
00:40:12,880 --> 00:40:10,310  
between 90 and 100 billion that puts it

912  
00:40:16,270 --> 00:40:12,890  
almost double the size of the movie and

913  
00:40:18,480 --> 00:40:16,280

music industries combined in third place

914

00:40:21,900 --> 00:40:18,490

behind broadcast and cable television

915

00:40:24,250 --> 00:40:21,910

so the gamer community is significant

916

00:40:27,640 --> 00:40:24,260

while serious gaming has only been up

917

00:40:30,400 --> 00:40:27,650

going for 30 plus years that's not

918

00:40:32,710 --> 00:40:30,410

including the arcade games like pong and

919

00:40:34,420 --> 00:40:32,720

pac-man that sort of thing comics have

920

00:40:36,819 --> 00:40:34,430

been on the market since the early 20th

921

00:40:39,670 --> 00:40:36,829

century Japanese manga go back even

922

00:40:41,890 --> 00:40:39,680

further comic book sales nowhere near

923

00:40:43,780 --> 00:40:41,900

match those of gaming but there are

924

00:40:46,510 --> 00:40:43,790

content overlaps with many games based

925

00:40:47,350 --> 00:40:46,520

on comic book characters movies based on

926  
00:40:49,420 --> 00:40:47,360  
video game

927  
00:40:51,730 --> 00:40:49,430  
are rarely successful either critically

928  
00:40:53,650 --> 00:40:51,740  
or financially but those using comic

929  
00:40:56,290 --> 00:40:53,660  
book characters such as the plethora of

930  
00:40:59,410 --> 00:40:56,300  
superhero action films have struck a

931  
00:41:01,780 --> 00:40:59,420  
deeper vein of gold the 56 films based

932  
00:41:03,910 --> 00:41:01,790  
on Marvel Comics that's 56 and Counting

933  
00:41:05,920 --> 00:41:03,920  
that includes Iron Man The Hulk

934  
00:41:08,920 --> 00:41:05,930  
spider-man cetera not to mention the

935  
00:41:10,900 --> 00:41:08,930  
Avengers those have been released

936  
00:41:14,260 --> 00:41:10,910  
worldwide have grossed a combined thirty

937  
00:41:16,510 --> 00:41:14,270  
1 billion dollars u.s. it's a serious

938  
00:41:18,820 --> 00:41:16,520

business but why do we mention in a

939

00:41:20,200 --> 00:41:18,830

skeptic broadcaster even a skeptic

940

00:41:22,420 --> 00:41:20,210

magazine where this thing came from

941

00:41:24,190 --> 00:41:22,430

well apart for the nerd factor which is

942

00:41:26,320 --> 00:41:24,200

often shared between skeptics and gamers

943

00:41:31,270 --> 00:41:26,330

there is at least one site that takes

944

00:41:35,380 --> 00:41:31,280

both aspects very seriously indeed a IPT

945

00:41:38,980 --> 00:41:35,390

explanation comics which is WWE enters

946

00:41:42,490 --> 00:41:38,990

in poor taste calm we're started by two

947

00:41:45,160 --> 00:41:42,500

people as a blog in 2011 it has now

948

00:41:48,370 --> 00:41:45,170

grown to dozens of contributors and some

949

00:41:50,700 --> 00:41:48,380

of them are women it changed its name to

950

00:41:53,650 --> 00:41:50,710

a IPT comics to avoid any negative

951  
00:41:56,050 --> 00:41:53,660  
communications or connotations and

952  
00:41:58,540 --> 00:41:56,060  
adventures in poor taste Brody gives

953  
00:42:00,820 --> 00:41:58,550  
away some of that the problems that were

954  
00:42:02,650 --> 00:42:00,830  
raised that's now sporting much

955  
00:42:05,020 --> 00:42:02,660  
scientific content alongside the

956  
00:42:07,200 --> 00:42:05,030  
information on comics gaming gaming TV

957  
00:42:09,640 --> 00:42:07,210  
movies and wrestling for some reason

958  
00:42:13,360 --> 00:42:09,650  
some of this is the science of

959  
00:42:15,130 --> 00:42:13,370  
superheroes but Russ Dobler who's the

960  
00:42:16,870 --> 00:42:15,140  
editor of the science section says that

961  
00:42:19,030 --> 00:42:16,880  
yeah there's a whole category for that

962  
00:42:21,430 --> 00:42:19,040  
but we also like the methods of science

963  
00:42:22,890 --> 00:42:21,440

not just the facts that's why there's

964

00:42:25,590 --> 00:42:22,900

another whole section for skepticism

965

00:42:29,670 --> 00:42:25,600

sciences loud-mouthed little brother

966

00:42:33,090 --> 00:42:29,680

that's his words in fact a apt in

967

00:42:35,620 --> 00:42:33,100

February every year as skepticism month

968

00:42:38,440 --> 00:42:35,630

skepticism in pop culture and skepticism

969

00:42:39,610 --> 00:42:38,450

of pop culture but it's not just pop

970

00:42:42,100 --> 00:42:39,620

culture there are heavyweight

971

00:42:43,920 --> 00:42:42,110

contributions a professor of biology at

972

00:42:46,120 --> 00:42:43,930

the City University in New York

973

00:42:49,090 --> 00:42:46,130

contributed a book review taking down

974

00:42:51,070 --> 00:42:49,100

creationism another expert took a

975

00:42:53,980 --> 00:42:51,080

decidedly critical look at a new TV

976  
00:42:56,140 --> 00:42:53,990  
program on paranormal videos just two

977  
00:43:00,130 --> 00:42:56,150  
examples of the many that are skeptical

978  
00:43:01,180 --> 00:43:00,140  
in this website it's not nerd fanboy

979  
00:43:03,670 --> 00:43:01,190  
stuff

980  
00:43:05,589 --> 00:43:03,680  
which are not surprising as Dobler is

981  
00:43:08,650 --> 00:43:05,599  
also the newly elected president of the

982  
00:43:11,109 --> 00:43:08,660  
new york city skeptics he says I believe

983  
00:43:12,670 --> 00:43:11,119  
in getting beyond the echo chamber to

984  
00:43:15,190 --> 00:43:12,680  
reach the people who really need it

985  
00:43:17,559 --> 00:43:15,200  
and pop geek culture is a great way to

986  
00:43:19,690 --> 00:43:17,569  
do that the more skeptics that get

987  
00:43:22,210 --> 00:43:19,700  
involved the better the numbers look and

988  
00:43:26,079 --> 00:43:22,220

the more leverage we have to open other

989

00:43:27,490 --> 00:43:26,089

doors in mainstream media there's a lot

990

00:43:29,799 --> 00:43:27,500

of good reading out there even if you're

991

00:43:32,200 --> 00:43:29,809

not a gamer and this site is highly

992

00:43:33,819 --> 00:43:32,210

recommended by myself not just for the

993

00:43:35,620 --> 00:43:33,829

content but also because it takes

994

00:43:38,319 --> 00:43:35,630

skepticism into an audience that might

995

00:43:41,190 --> 00:43:38,329

previously have been largely unaware of

996

00:43:45,099 --> 00:43:41,200

what scientific skepticism really is as

997

00:43:46,690 --> 00:43:45,109

a postscript to that you have to look

998

00:43:49,559 --> 00:43:46,700

that it's not just gaming and stuff

999

00:43:52,270 --> 00:43:49,569

nerds are also highly fashion conscious

1000

00:43:55,120 --> 00:43:52,280

there might be an exaggeration so while

1001  
00:43:58,990 --> 00:43:55,130  
you're looking at the gamers sites think

1002  
00:44:00,520 --> 00:43:59,000  
about the look of a nerdiness and the

1003  
00:44:02,589 --> 00:44:00,530  
look of nutritionist would not be

1004  
00:44:07,450 --> 00:44:02,599  
complete without mentioning the nerdiest

1005  
00:44:12,609 --> 00:44:07,460  
coolest t-shirt company snog tease which

1006  
00:44:14,740 --> 00:44:12,619  
is snog tease tws calm founded in 2004

1007  
00:44:16,750 --> 00:44:14,750  
the range features pop-culture

1008  
00:44:19,660 --> 00:44:16,760  
references bad puns and sometimes quite

1009  
00:44:21,309 --> 00:44:19,670  
heavy scientific concepts the founders

1010  
00:44:24,309 --> 00:44:21,319  
say they started the company in their

1011  
00:44:26,099 --> 00:44:24,319  
basement and faked everybody into

1012  
00:44:29,260 --> 00:44:26,109  
thinking that we own an actual business

1013  
00:44:33,099 --> 00:44:29,270

we've even shipped a t-shirt to NASA

1014

00:44:34,820 --> 00:44:33,109

they means space so technically we're a

1015

00:44:44,710 --> 00:44:34,830

universal company

1016

00:44:48,200 --> 00:44:44,720

so we're your nerdiness with pride and

1017

00:44:51,850 --> 00:44:48,210

that was geeks gamers nerds and kids

1018

00:45:09,170 --> 00:44:51,860

from the pages of the skeptic March 2019

1019

00:45:10,970 --> 00:45:09,180

vol 39 hi this is Steve novella from the

1020

00:45:12,920 --> 00:45:10,980

skeptics guide to the universe podcast

1021

00:45:14,270 --> 00:45:12,930

me and my fellow rogues are really

1022

00:45:16,180 --> 00:45:14,280

looking forward to coming down to

1023

00:45:19,190 --> 00:45:16,190

Melbourne Australia for a skeptic on

1024

00:45:21,590 --> 00:45:19,200

2019 in December we hope to see all of

1025

00:45:23,690 --> 00:45:21,600

our skeptical friends down there so hey

1026  
00:45:25,060 --> 00:45:23,700  
we'll see you guys all down in Melbourne

1027  
00:45:29,560 --> 00:45:25,070  
in December

1028  
00:45:32,660 --> 00:45:29,570  
[Music]

1029  
00:45:37,040 --> 00:45:32,670  
hi I'm doctor Brad Makai and I'll be

1030  
00:45:39,530 --> 00:45:37,050  
seeing you at skeptic on 2019 I'm a GP

1031  
00:45:42,110 --> 00:45:39,540  
and I have patients coming in with all

1032  
00:45:44,000 --> 00:45:42,120  
sorts of weird and wacky home remedies

1033  
00:45:45,860 --> 00:45:44,010  
so we're going to be having a look at

1034  
00:45:48,920 --> 00:45:45,870  
those and seeing which one's work and

1035  
00:46:06,160 --> 00:45:48,930  
which ones aren't quite so successful

1036  
00:46:11,150 --> 00:46:08,480  
thank you for listening to the skeptic

1037  
00:46:13,850 --> 00:46:11,160  
zone this week coming up on next week's

1038  
00:46:15,380 --> 00:46:13,860

show the final part of the psyche on

1039

00:46:17,900 --> 00:46:15,390

interviews with guest reporter Rob

1040

00:46:20,780 --> 00:46:17,910

Palmer more news and interviews about

1041

00:46:23,480 --> 00:46:20,790

the upcoming skeptic on convention right

1042

00:46:26,270 --> 00:46:23,490

here in Melbourne and as ever the rest

1043

00:46:27,980 --> 00:46:26,280

is in the lap of the gods sometimes I

1044

00:46:30,650 --> 00:46:27,990

really don't know what's coming up on

1045

00:46:32,540 --> 00:46:30,660

next week's show thank you to those new

1046

00:46:34,540 --> 00:46:32,550

patrons who have come on board to help

1047

00:46:37,250 --> 00:46:34,550

support the skeptic zone financially

1048

00:46:40,070 --> 00:46:37,260

every cent of the money you send in does

1049

00:46:42,410 --> 00:46:40,080

go to help the skeptic zones stay on the

1050

00:46:44,420 --> 00:46:42,420

air in your ears on the Internet's and

1051

00:46:47,150 --> 00:46:44,430

thank you to those people who have made

1052

00:46:50,240 --> 00:46:47,160

other contributions lately much

1053

00:46:52,160 --> 00:46:50,250

appreciated I think I'm still trying to

1054

00:46:55,160 --> 00:46:52,170

recover from last night's wonderful Sri

1055

00:46:57,200 --> 00:46:55,170

Lankan curry dinner hmm I'm gonna be

1056

00:46:59,660 --> 00:46:57,210

recovering for the rest of the week I

1057

00:47:01,760 --> 00:46:59,670

think but until the next week's show

1058

00:47:08,780 --> 00:47:01,770

this is Richard Saunders signing off

1059

00:47:10,850 --> 00:47:08,790

from Melbourne Australia you've been

1060

00:47:16,310 --> 00:47:10,860

listening to the skeptic zone podcast

1061

00:47:19,340 --> 00:47:16,320

please visit our website at WWDC be for

1062

00:47:22,000 --> 00:47:19,350

show notes contacts and to access the

1063

00:47:25,280 --> 00:47:22,010

back catalogue of episodes going back to

1064

00:47:28,910 --> 00:47:25,290

2008 you can follow the skeptic zone

1065

00:47:31,340 --> 00:47:28,920

podcast on twitter at skeptic zone visit

1066

00:47:34,700 --> 00:47:31,350

our facebook page or leave a review on

1067

00:47:38,060 --> 00:47:34,710

itunes you can also support the skeptic

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00:47:40,430 --> 00:47:38,070

zone via patreon or PayPal the skeptic

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00:47:42,380 --> 00:47:40,440

zone podcast is an independent

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00:47:44,540 --> 00:47:42,390

production reviews and opinions

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00:47:46,730 --> 00:47:44,550

expressed on the skeptic zone and not

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00:47:49,670 --> 00:47:46,740

necessarily those of Australian skeptics