

1
00:00:05,980 --> 00:00:13,679
welcome to the skeptic zone the podcast

2
00:00:09,099 --> 00:00:13,679
from Australia for science and reason

3
00:00:22,640 --> 00:00:29,130
hello and welcome to the skeptic zone

4
00:00:25,350 --> 00:00:31,770
episode Number 295 for the 15th of jun

5
00:00:29,129 --> 00:00:34,079
2014 Richard Saunders here with you from

6
00:00:31,769 --> 00:00:38,039
Sydney Australia halfway through June

7
00:00:34,079 --> 00:00:41,070
already July is not far away I'll be

8
00:00:38,039 --> 00:00:43,378
heading out to the amazing meeting in

9
00:00:41,070 --> 00:00:45,359
July but more about that soon i guess

10
00:00:43,378 --> 00:00:47,579
and i hope to bring you many reports

11
00:00:45,359 --> 00:00:49,920
from the amazing meeting i'll see if i

12
00:00:47,579 --> 00:00:51,628
can run around I'll pretend I may not

13
00:00:49,920 --> 00:00:54,270
i'll run around with my microphone and

14
00:00:51,628 --> 00:00:56,939
get some interesting interviews from

15
00:00:54,270 --> 00:00:59,160
there i'm sure let's see what's coming

16
00:00:56,939 --> 00:01:00,750
up on this week's episode of the skeptic

17
00:00:59,159 --> 00:01:04,228
zone we're going to kick off with a

18
00:01:00,750 --> 00:01:09,420
grain of salt with a Rancic f now a run

19
00:01:04,228 --> 00:01:13,409
talk to Johnny Scaramanga who grew up as

20
00:01:09,420 --> 00:01:15,868
a fundamentalist Christian and he's sort

21
00:01:13,409 --> 00:01:17,009
of a broken away from that now he's

22
00:01:15,868 --> 00:01:20,728
going to tell us what it's like growing

23
00:01:17,009 --> 00:01:23,159
up in that sort of atmosphere very

24
00:01:20,728 --> 00:01:26,189
interesting report another one another

25
00:01:23,159 --> 00:01:28,379
one of Iran's reports from QED in

26
00:01:26,189 --> 00:01:30,569
Manchester following that it's a week in

27
00:01:28,379 --> 00:01:36,750
science from the Royal Institution of

28
00:01:30,569 --> 00:01:39,569
Australia at ww RI a u.s. org a you then

29

00:01:36,750 --> 00:01:42,118
we have a sort of a guest editorial from

30
00:01:39,569 --> 00:01:45,269
cigna Kane she's going to be telling us

31
00:01:42,118 --> 00:01:47,478
about well why we should ignore what

32
00:01:45,269 --> 00:01:51,478
anti-vaxxers have to say in their

33
00:01:47,478 --> 00:01:53,129
conspiracy theories yeah it's like

34
00:01:51,478 --> 00:01:54,510
talking to a brick wall sometimes

35
00:01:53,129 --> 00:01:56,459
talking to some of these people in fact

36
00:01:54,510 --> 00:01:59,609
I've had better conversations with a

37
00:01:56,459 --> 00:02:01,319
brick wall that's coming up somewhere in

38
00:01:59,609 --> 00:02:03,329
the middle of the show now this

39
00:02:01,319 --> 00:02:07,709
editorial was originally published on

40
00:02:03,329 --> 00:02:10,228
medium which is at medium calm and I'll

41
00:02:07,709 --> 00:02:12,959
include a link that in the show notes

42
00:02:10,229 --> 00:02:15,959
for this week after that it's evidence

43
00:02:12,959 --> 00:02:18,049

please with Joe alabaster Joe's going to

44

00:02:15,959 --> 00:02:20,759

be telling us about some of the woo and

45

00:02:18,049 --> 00:02:23,640

interesting things going on that well

46

00:02:20,759 --> 00:02:25,649

aimed at young mothers or young parents

47

00:02:23,639 --> 00:02:27,149

pregnant women that sort of thing and to

48

00:02:25,650 --> 00:02:29,640

round off the show it's our roving

49

00:02:27,150 --> 00:02:30,810

reporter dr. Christie Wilson roving into

50

00:02:29,639 --> 00:02:33,059

each he's all the way

51

00:02:30,810 --> 00:02:34,500

over there in London she's going to be

52

00:02:33,060 --> 00:02:38,189

telling us about a new book called the

53

00:02:34,500 --> 00:02:40,680

survival hypothesis because she included

54

00:02:38,189 --> 00:02:43,439

a chapter a skeptical chapter in a

55

00:02:40,680 --> 00:02:45,390

probably not a very skeptical book know

56

00:02:43,439 --> 00:02:48,239

those people who follow me on twitter at

57

00:02:45,389 --> 00:02:51,389

skeptic zone would have seen that i put

58
00:02:48,239 --> 00:02:54,900
up a little video of some outtakes and

59
00:02:51,389 --> 00:02:57,208
bloopers and things that I'd I made when

60
00:02:54,900 --> 00:02:59,370
I was filming some of the vaccination

61
00:02:57,209 --> 00:03:00,659
chronicles that is almost completed my

62
00:02:59,370 --> 00:03:02,099
friends I'm really pleased about this

63
00:03:00,659 --> 00:03:04,500
it's taken a long time much longer than

64
00:03:02,098 --> 00:03:06,719
I thought but the timelines or they're

65
00:03:04,500 --> 00:03:08,549
all the interviews are in place going to

66
00:03:06,719 --> 00:03:10,379
do some music this week with our co-host

67
00:03:08,549 --> 00:03:13,530
Stefan Soyka who appears from time to

68
00:03:10,379 --> 00:03:16,049
time a few more little archival videos

69
00:03:13,530 --> 00:03:18,299
I'm chasing up or images and then I

70
00:03:16,049 --> 00:03:21,719
think it'll just be about ready to go

71
00:03:18,299 --> 00:03:23,310
looking forward to that I never knew it

72
00:03:21,719 --> 00:03:25,889
took so long to put a little documentary

73
00:03:23,310 --> 00:03:28,080
together but are you'll be the first

74
00:03:25,889 --> 00:03:29,399
year well no you won't you'll be not

75
00:03:28,080 --> 00:03:32,400
quite the first thing you'll be amongst

76
00:03:29,400 --> 00:03:35,310
the first people to hear when that goes

77
00:03:32,400 --> 00:03:36,959
online very soon I hope but for now I'm

78
00:03:35,310 --> 00:03:41,909
going to run downstairs i'm going to

79
00:03:36,959 --> 00:03:44,069
open the dry crackers trike crackers in

80
00:03:41,909 --> 00:03:48,599
the last few days i seem to have picked

81
00:03:44,069 --> 00:03:50,789
up some sort of weird bug which means

82
00:03:48,599 --> 00:03:53,909
that a lot of food is not very appealing

83
00:03:50,789 --> 00:03:56,519
to me right now dry crackers and dry

84
00:03:53,909 --> 00:03:58,979
ginger ale I think I'll do the trick and

85
00:03:56,519 --> 00:04:03,289
while i'm slowly and carefully eating

86

00:03:58,979 --> 00:04:03,289
that I hope you enjoy the skeptic zone

87
00:04:18,019 --> 00:04:28,829
let's all take this with a grain of salt

88
00:04:20,810 --> 00:04:31,889
he's around second i'm here with Johnny

89
00:04:28,829 --> 00:04:36,019
Scaramanga with whom I shared the stage

90
00:04:31,889 --> 00:04:39,870
today we were panel about religion

91
00:04:36,019 --> 00:04:43,529
persecutor or persecuted and johnny has

92
00:04:39,870 --> 00:04:45,780
a very interesting life story in which

93
00:04:43,529 --> 00:04:47,250
he partially writes about in his blog

94
00:04:45,779 --> 00:04:49,319
what's animal you belonged on my process

95
00:04:47,250 --> 00:04:51,240
for leaving fundamentalism and what is

96
00:04:49,319 --> 00:04:56,668
the life story that led to writing that

97
00:04:51,240 --> 00:04:58,949
blog well I was born into the crazy end

98
00:04:56,668 --> 00:05:00,569
of Christianity I've just alienated half

99
00:04:58,949 --> 00:05:01,949
the people i'm trying to speak to you by

100
00:05:00,569 --> 00:05:04,860

calling it the crater in christianity

101

00:05:01,949 --> 00:05:07,050

but it was it was it was crazy i was in

102

00:05:04,860 --> 00:05:09,629

like a mixture of all the different

103

00:05:07,050 --> 00:05:11,639

kinds of fairly extreme and conservative

104

00:05:09,629 --> 00:05:13,228

christianity that there is because my

105

00:05:11,639 --> 00:05:15,240

mum worked for kenneth copeland

106

00:05:13,228 --> 00:05:17,459

ministries he's one of the american TV

107

00:05:15,240 --> 00:05:19,199

evangelists that you'll see on channels

108

00:05:17,459 --> 00:05:20,849

like TBN saying you know if you give

109

00:05:19,199 --> 00:05:22,740

money to God then he will give you a

110

00:05:20,850 --> 00:05:25,020

hundred times that back and so I was

111

00:05:22,740 --> 00:05:26,490

given on the day I was born a Bible with

112

00:05:25,019 --> 00:05:28,199

his signature in the front that said

113

00:05:26,490 --> 00:05:30,840

Jesus is Lord and this is the world that

114

00:05:28,199 --> 00:05:32,250

I was born into and then I went to a

115
00:05:30,839 --> 00:05:33,989
school that used the accelerated

116
00:05:32,250 --> 00:05:35,610
Christian education curriculum which is

117
00:05:33,990 --> 00:05:38,280
a different kind of conservative

118
00:05:35,610 --> 00:05:40,319
Christian that was a Baptist and tore

119
00:05:38,279 --> 00:05:42,418
creationism instead of science and we

120
00:05:40,319 --> 00:05:44,370
did not have this is something that I am

121
00:05:42,418 --> 00:05:46,649
pretty sure that listeners to our

122
00:05:44,370 --> 00:05:48,810
podcast would have no idea what so maybe

123
00:05:46,649 --> 00:05:51,719
he could elaborate a little bit more

124
00:05:48,810 --> 00:05:55,199
about being but this accelerated to

125
00:05:51,720 --> 00:05:58,860
Christian education sure ace hey we hate

126
00:05:55,199 --> 00:06:01,529
being grace so let's call a mace and so

127
00:05:58,860 --> 00:06:04,379
they don't have teachers in the normal

128
00:06:01,529 --> 00:06:07,679
sense in these schools yeah the kids for

129
00:06:04,379 --> 00:06:09,300
most of the week are working at desks

130
00:06:07,680 --> 00:06:10,889
which are enclosed on three sides with

131
00:06:09,300 --> 00:06:12,000
high screens between the students to

132
00:06:10,889 --> 00:06:16,050
stop them from interacting with each

133
00:06:12,000 --> 00:06:17,170
other and so you're working in silence

134
00:06:16,050 --> 00:06:20,509
on these

135
00:06:17,170 --> 00:06:23,060
worksheets that combine the religious

136
00:06:20,509 --> 00:06:24,920
teachings into every academic subject so

137
00:06:23,060 --> 00:06:27,949
when you're studying history you're

138
00:06:24,920 --> 00:06:28,910
studying how the reason stuff happened

139
00:06:27,949 --> 00:06:30,819
the way it did is because it was all

140
00:06:28,910 --> 00:06:33,740
part of God's plan which was to

141
00:06:30,819 --> 00:06:35,509
ultimately create America as a Christian

142
00:06:33,740 --> 00:06:37,160
nation and see the creation of the State

143

00:06:35,509 --> 00:06:39,469
of Israel those were the two big things

144
00:06:37,160 --> 00:06:41,810
on God's God's agenda and then if you're

145
00:06:39,470 --> 00:06:44,630
doing science you're learning about how

146
00:06:41,810 --> 00:06:46,819
evolution is bunk and what happened in

147
00:06:44,629 --> 00:06:49,399
Genesis literally happened 6,000 years

148
00:06:46,819 --> 00:06:51,920
ago we're both maths maths they

149
00:06:49,399 --> 00:06:53,719
struggled to touch difficult to make a

150
00:06:51,920 --> 00:06:55,790
Christian version mask so they have lots

151
00:06:53,720 --> 00:06:57,710
of Bible verses on the page while you're

152
00:06:55,790 --> 00:06:59,960
doing maths and then occasion you'd get

153
00:06:57,709 --> 00:07:04,370
something like you know the Bible says

154
00:06:59,959 --> 00:07:06,019
Goliath was X cubits tall so there's

155
00:07:04,370 --> 00:07:08,120
this many cubits and a foot and this

156
00:07:06,019 --> 00:07:13,250
many fee and a meter so how many meters

157
00:07:08,120 --> 00:07:14,660

tall was Goliath okay so how long were

158

00:07:13,250 --> 00:07:16,129

you thought subject to this kind of

159

00:07:14,660 --> 00:07:18,530

education actually not very long

160

00:07:16,129 --> 00:07:20,300

compared to a lot of people I did it for

161

00:07:18,529 --> 00:07:22,099

my first year of preschool when I was

162

00:07:20,300 --> 00:07:24,110

three years old and then I went to a

163

00:07:22,100 --> 00:07:26,629

normal primary school and went back when

164

00:07:24,110 --> 00:07:28,430

I was 11 just before I was due to go

165

00:07:26,629 --> 00:07:30,920

into secondary school and I was there

166

00:07:28,430 --> 00:07:33,019

until just before I turned 15 so it's

167

00:07:30,920 --> 00:07:34,879

like four years in total that I was

168

00:07:33,019 --> 00:07:37,579

there and some people do it for you know

169

00:07:34,879 --> 00:07:38,750

12 or 13 and that must really Bend

170

00:07:37,579 --> 00:07:41,329

you're out of shape because it's taken

171

00:07:38,750 --> 00:07:43,220

me ever since to kind of process what

172
00:07:41,329 --> 00:07:45,740
happened to me there so what did happen

173
00:07:43,220 --> 00:07:47,810
since then so you'll obviously left

174
00:07:45,740 --> 00:07:51,530
religion but so you survived

175
00:07:47,810 --> 00:07:53,360
fundamentalism and you you've left that

176
00:07:51,529 --> 00:07:56,059
way of life yeah well what's the story

177
00:07:53,360 --> 00:07:57,800
around that that's a long story i'm in

178
00:07:56,060 --> 00:08:02,449
the middle of writing a book about that

179
00:07:57,800 --> 00:08:05,900
so the short answers but over the cover

180
00:08:02,449 --> 00:08:09,579
the you know the back of the book right

181
00:08:05,899 --> 00:08:12,439
yeah there's a little bit of a bird so I

182
00:08:09,579 --> 00:08:13,759
had a meltdown one day I i loved the

183
00:08:12,439 --> 00:08:15,620
school when I first I'd go into this

184
00:08:13,759 --> 00:08:17,779
school I was thought this is where God

185
00:08:15,620 --> 00:08:20,360
wants me to be and I am so lucky to be

186
00:08:17,779 --> 00:08:23,659
here and then I became suicidal he will

187
00:08:20,360 --> 00:08:26,120
hold with them 11 and I became suicidal

188
00:08:23,660 --> 00:08:27,590
in quite a short space of time after

189
00:08:26,120 --> 00:08:30,079
after going there

190
00:08:27,589 --> 00:08:32,919
and I couldn't work out why at the time

191
00:08:30,079 --> 00:08:35,360
it now seems really obvious to me and

192
00:08:32,919 --> 00:08:36,740
eventually I had this big meltdown in

193
00:08:35,360 --> 00:08:38,779
school one day I couldn't see for a few

194
00:08:36,740 --> 00:08:40,789
seconds and then the next thing I knew I

195
00:08:38,779 --> 00:08:43,129
was shouting everyone and then I slammed

196
00:08:40,789 --> 00:08:44,689
the door walked out when my parents

197
00:08:43,129 --> 00:08:45,919
found out that happened they took the

198
00:08:44,690 --> 00:08:47,510
decision to remove me from the school

199
00:08:45,919 --> 00:08:49,519
and I started getting a proper education

200

00:08:47,509 --> 00:08:51,019
so I was really lucky I was able to do

201
00:08:49,519 --> 00:08:54,679
the last four years of school in a

202
00:08:51,019 --> 00:08:56,269
fairly normal way and that meant I

203
00:08:54,679 --> 00:08:57,799
started to get a good education it was

204
00:08:56,269 --> 00:08:59,449
really difficult because the teachers

205
00:08:57,799 --> 00:09:01,669
would talk to me about all kinds of

206
00:08:59,450 --> 00:09:03,770
stuff that I just felt was was wrong and

207
00:09:01,669 --> 00:09:05,509
I freaked out by it but eventually I had

208
00:09:03,769 --> 00:09:07,549
my mind opened enough by by going to

209
00:09:05,509 --> 00:09:09,019
school with sinners and realizing they

210
00:09:07,549 --> 00:09:11,469
weren't these evil junkies that I've

211
00:09:09,019 --> 00:09:14,870
been told that they were going to be and

212
00:09:11,470 --> 00:09:17,180
so Nate Phelps today in his talk

213
00:09:14,870 --> 00:09:19,340
mentions it talked about the the phases

214
00:09:17,179 --> 00:09:21,589

of leaving Christianity yeah yeah says

215

00:09:19,340 --> 00:09:24,200

that there's the ha moment then there's

216

00:09:21,590 --> 00:09:26,840

what was they thinking moment here and

217

00:09:24,200 --> 00:09:30,620

then though what was I thinking last was

218

00:09:26,840 --> 00:09:35,540

a yes aha moment frolic yeah so what was

219

00:09:30,620 --> 00:09:37,429

your our moment I don't know if I had

220

00:09:35,539 --> 00:09:40,099

one but one that was really important to

221

00:09:37,429 --> 00:09:43,069

me was that acee teaches that God is

222

00:09:40,100 --> 00:09:44,509

right wing and the the more Christian

223

00:09:43,070 --> 00:09:45,680

you are the more the further to write

224

00:09:44,509 --> 00:09:48,409

you will be on the political spectrum

225

00:09:45,679 --> 00:09:49,939

and idle taking that very much to heart

226

00:09:48,409 --> 00:09:51,439

and I took all their lessons about how

227

00:09:49,940 --> 00:09:53,960

communism is the most evil thing in the

228

00:09:51,440 --> 00:09:59,750

world and I took politics a level and so

229
00:09:53,960 --> 00:10:01,370
you don't look old enough to to have had

230
00:09:59,750 --> 00:10:03,049
all this kind of education during the

231
00:10:01,370 --> 00:10:05,210
time when communism was a real threat

232
00:10:03,049 --> 00:10:06,919
unless you lived in North Korea know

233
00:10:05,210 --> 00:10:09,470
right did the truck thing about

234
00:10:06,919 --> 00:10:11,089
fundamentalism is that it is really

235
00:10:09,470 --> 00:10:14,629
rooted in the past it doesn't believe in

236
00:10:11,090 --> 00:10:16,580
change so fundamentalism developed

237
00:10:14,629 --> 00:10:17,899
during the Cold War Christian

238
00:10:16,580 --> 00:10:20,870
fundamentalism is a really recent

239
00:10:17,899 --> 00:10:24,350
phenomenon and it's real peak of like

240
00:10:20,870 --> 00:10:25,970
growth was in the 60s and 70s so all of

241
00:10:24,350 --> 00:10:30,500
this curriculum that I was studying was

242
00:10:25,970 --> 00:10:33,500
written in the 1980s at the most recent

243

00:10:30,500 --> 00:10:35,120

really so all these Cold War kind of

244

00:10:33,500 --> 00:10:37,269

concerns about communism were really

245

00:10:35,120 --> 00:10:38,950

prevalent in the curriculum even though

246

00:10:37,269 --> 00:10:41,110

mism of fallen and it really was

247

00:10:38,950 --> 00:10:42,759

irrelevant and so I was being too all

248

00:10:41,110 --> 00:10:43,779

the stuff about how evil socialism and

249

00:10:42,759 --> 00:10:45,370

communism were and how they were a

250

00:10:43,779 --> 00:10:46,929

threat to our way of life and when I

251

00:10:45,370 --> 00:10:49,179

eventually had a politics teacher that

252

00:10:46,929 --> 00:10:52,659

told me what communism was I was like oh

253

00:10:49,179 --> 00:10:54,879

so so you mean it's sharing that's kind

254

00:10:52,659 --> 00:10:56,319

of nice that's looks like me maybe it

255

00:10:54,879 --> 00:10:58,659

doesn't work in practice but you know

256

00:10:56,320 --> 00:11:00,490

it's not evil I've been like raised so I

257

00:10:58,659 --> 00:11:03,100
was like there was this definite moment

258
00:11:00,490 --> 00:11:05,289
of Rio having realized that and also

259
00:11:03,100 --> 00:11:07,600
realizing that natural selection was

260
00:11:05,289 --> 00:11:08,679
actually kind of plausible right okay so

261
00:11:07,600 --> 00:11:12,159
what else have they been lying to me

262
00:11:08,679 --> 00:11:15,759
about and when what stage in your life

263
00:11:12,159 --> 00:11:17,469
was that that was when I was 18 nothing

264
00:11:15,759 --> 00:11:19,149
but actually it scared the hell out of

265
00:11:17,470 --> 00:11:21,879
me I didn't then think about it again I

266
00:11:19,149 --> 00:11:24,490
read some stuff that made me think what

267
00:11:21,879 --> 00:11:27,039
i believe is indefensible and the

268
00:11:24,490 --> 00:11:28,870
arguments that i had were essentially

269
00:11:27,039 --> 00:11:31,269
you can't trust your own reasoning

270
00:11:28,870 --> 00:11:32,919
because you're a fallen human you have a

271
00:11:31,269 --> 00:11:34,929

sin nature and therefore you're not

272

00:11:32,919 --> 00:11:36,870
capable of seeing the truth so you just

273

00:11:34,929 --> 00:11:39,219
have to trust take god's word for it and

274

00:11:36,870 --> 00:11:44,310
by the way I'm the preacher I know what

275

00:11:39,220 --> 00:11:46,240
God's Word is so listen to me and I

276

00:11:44,309 --> 00:11:47,589
didn't think about it again for a few

277

00:11:46,240 --> 00:11:48,700
years but then when I got to university

278

00:11:47,590 --> 00:11:51,250
I couldn't I couldn't leave it alone

279

00:11:48,700 --> 00:11:53,050
anymore i started to wrestle with with

280

00:11:51,250 --> 00:11:54,190
it and then the god delusion came out at

281

00:11:53,049 --> 00:11:57,219
the same time and i read that and that

282

00:11:54,190 --> 00:11:58,690
actually made me more defensive the god

283

00:11:57,220 --> 00:12:01,450
delusion made me want to stick up for

284

00:11:58,690 --> 00:12:02,770
religion even though i but it also made

285

00:12:01,450 --> 00:12:05,500
me realize that a lot of stuff that i

286
00:12:02,769 --> 00:12:07,210
believe was untenable and it was just a

287
00:12:05,500 --> 00:12:11,379
long run really painful and difficult

288
00:12:07,210 --> 00:12:13,060
process of leaving it behind and it took

289
00:12:11,379 --> 00:12:16,059
me 10 years from when i left the school

290
00:12:13,059 --> 00:12:17,529
to like being ready to go okay yeah none

291
00:12:16,059 --> 00:12:19,569
of that none of that's real and when did

292
00:12:17,529 --> 00:12:24,039
you start loading your blog I started

293
00:12:19,570 --> 00:12:27,190
the blog in 2012 and that was because a

294
00:12:24,039 --> 00:12:28,419
UK government agency had recognized some

295
00:12:27,190 --> 00:12:30,760
qualifications that are based from

296
00:12:28,419 --> 00:12:32,979
accelerators Christian education and I

297
00:12:30,759 --> 00:12:34,870
was like okay no one is going to do

298
00:12:32,980 --> 00:12:36,759
anything about this if I didn't speak

299
00:12:34,870 --> 00:12:38,590
out something's got to be done about the

300
00:12:36,759 --> 00:12:41,500
fact the kids are being given this miss

301
00:12:38,590 --> 00:12:43,030
education this the being deprived the

302
00:12:41,500 --> 00:12:44,259
rights to learn and to think for

303
00:12:43,029 --> 00:12:47,828
themselves and

304
00:12:44,259 --> 00:12:49,329
wrong and what about your relationship

305
00:12:47,828 --> 00:12:52,358
with your family I mean that they are

306
00:12:49,328 --> 00:12:54,818
aware that you're you're not a believer

307
00:12:52,359 --> 00:12:56,350
anymore so I mean they obviously have to

308
00:12:54,818 --> 00:12:58,628
be aware of your way of life but do they

309
00:12:56,350 --> 00:13:00,249
understand the deeper implications in

310
00:12:58,629 --> 00:13:03,069
terms of your beliefs and opinions yeah

311
00:13:00,249 --> 00:13:04,839
well my dad died when I was 17 which was

312
00:13:03,068 --> 00:13:07,509
a huge thing because my family believed

313
00:13:04,839 --> 00:13:08,919
in healing and and a part a preacher

314

00:13:07,509 --> 00:13:10,538
actually said to my mum you know you're

315
00:13:08,918 --> 00:13:12,609
responsible for whether he lives or dies

316
00:13:10,538 --> 00:13:14,499
is be will be down to your faith and

317
00:13:12,609 --> 00:13:20,229
your prayers whether whether he dies on

318
00:13:14,499 --> 00:13:23,288
huh he died and we at that point that

319
00:13:20,229 --> 00:13:25,359
kind of meant that my mom and I were

320
00:13:23,288 --> 00:13:27,278
more free to think for ourselves without

321
00:13:25,359 --> 00:13:32,079
because he was kind of the driving force

322
00:13:27,278 --> 00:13:34,629
of of this level of fanaticism that

323
00:13:32,078 --> 00:13:36,338
there wasn't my family and so I went

324
00:13:34,629 --> 00:13:38,350
away to university and I was able to

325
00:13:36,339 --> 00:13:39,699
make a new circle of friends and have

326
00:13:38,350 --> 00:13:41,288
the freedom to think for myself without

327
00:13:39,698 --> 00:13:45,219
fear of being ostracized and my mum was

328
00:13:41,288 --> 00:13:46,688

able to start questioning things we know

329

00:13:45,220 --> 00:13:48,879

without having the pressure from her

330

00:13:46,688 --> 00:13:51,668

husband and so independently we both

331

00:13:48,879 --> 00:13:53,288

left it behind and so my mum is

332

00:13:51,668 --> 00:13:55,149

completely lived yeah she left it behind

333

00:13:53,288 --> 00:13:58,688

as well and I think that's more brave I

334

00:13:55,149 --> 00:14:01,269

think you know for me I like I got out I

335

00:13:58,688 --> 00:14:04,379

was pretty much free by Thomas 21 and

336

00:14:01,269 --> 00:14:06,308

although I'd had a bad start in life I

337

00:14:04,379 --> 00:14:08,528

had the rest of my life ahead of me

338

00:14:06,308 --> 00:14:11,588

whereas my mom got into it when she was

339

00:14:08,528 --> 00:14:14,739

21 and lost the most important years of

340

00:14:11,589 --> 00:14:16,449

her life and now that found herself at

341

00:14:14,739 --> 00:14:18,939

retirement age going the way I brought

342

00:14:16,448 --> 00:14:21,878

up my children damage them and what I

343
00:14:18,938 --> 00:14:23,858
have dedicated my life to is false and I

344
00:14:21,879 --> 00:14:25,629
have to deal with that and she has she's

345
00:14:23,859 --> 00:14:27,788
been a lot of people at that point would

346
00:14:25,629 --> 00:14:29,528
just push themselves back into their

347
00:14:27,788 --> 00:14:30,999
religion rather than face the reality of

348
00:14:29,528 --> 00:14:33,759
it and she hasn't so I think she's

349
00:14:30,999 --> 00:14:35,798
pretty heroic and we're working people

350
00:14:33,759 --> 00:14:38,048
find find out more about you what's the

351
00:14:35,798 --> 00:14:40,838
URL of your blog it's it's leaving

352
00:14:38,048 --> 00:14:44,129
fundamentalism dot wordpress com it's

353
00:14:40,839 --> 00:14:57,220
only thank you very much thank you

354
00:14:44,129 --> 00:14:59,919
oh hello dear skeptical ninjas my name

355
00:14:57,220 --> 00:15:02,230
is Jake Peralta and my name is Russ

356
00:14:59,919 --> 00:15:05,740
bulbs and we are here to talk to you

357
00:15:02,230 --> 00:15:08,259
about breeze skeptic amp which is coming

358
00:15:05,740 --> 00:15:10,509
up in July so who is speaking out for a

359
00:15:08,259 --> 00:15:13,029
skeptic amp will take you and I will be

360
00:15:10,509 --> 00:15:15,519
there as hosts as hosts and also

361
00:15:13,029 --> 00:15:17,799
recording the podcast a podcast right

362
00:15:15,519 --> 00:15:20,409
and we've got John Cook from skeptical

363
00:15:17,799 --> 00:15:22,839
science com well we've got Theo Clark

364
00:15:20,409 --> 00:15:24,730
who does hunting humble podcast and also

365
00:15:22,840 --> 00:15:26,950
the skeptics field guide that is amazing

366
00:15:24,730 --> 00:15:28,629
and Loretta mehran from friends of

367
00:15:26,950 --> 00:15:30,910
science and medicine that is fantastic

368
00:15:28,629 --> 00:15:33,250
and if all of that sounded too amazing

369
00:15:30,909 --> 00:15:35,709
we have a whole host of local skeptics

370
00:15:33,250 --> 00:15:37,299
from the Brisbane area so if I call me

371

00:15:35,710 --> 00:15:39,190
or do I also get a free set of steak

372
00:15:37,299 --> 00:15:41,829
knives well I would be quite skeptical

373
00:15:39,190 --> 00:15:44,230
of that time jack so how can I hide out

374
00:15:41,830 --> 00:15:46,570
more about brisket again you can go to

375
00:15:44,230 --> 00:15:49,269
brisket to camp org that was an

376
00:15:46,570 --> 00:15:51,850
advantageous Lee made web domain name I

377
00:15:49,269 --> 00:15:55,870
dare say yes and when he is red skeptic

378
00:15:51,850 --> 00:15:58,180
in July 19th this year so July 19 this

379
00:15:55,870 --> 00:16:00,100
year and it's free it's completely free

380
00:15:58,179 --> 00:16:02,169
completely free yeah with a free set of

381
00:16:00,100 --> 00:16:05,639
steak knives as well I would continue to

382
00:16:02,169 --> 00:16:09,029
be skeptical so go to brisk f to carroll

383
00:16:05,639 --> 00:16:09,029
right now

384
00:16:13,419 --> 00:16:17,809
welcome to a week in science from rars

385
00:16:16,250 --> 00:16:20,480

bringing you the science you need to

386

00:16:17,809 --> 00:16:23,089

know in 50 years we've seen technology

387

00:16:20,480 --> 00:16:25,550

go from computers the size of a house to

388

00:16:23,090 --> 00:16:32,930

the size of our palm the big question is

389

00:16:25,549 --> 00:16:35,559

how much smaller can it get in 1965

390

00:16:32,929 --> 00:16:37,969

Gordon ymore published a paper entitled

391

00:16:35,559 --> 00:16:40,219

cramming more components onto integrated

392

00:16:37,970 --> 00:16:42,050

circuits his work predicted the most

393

00:16:40,220 --> 00:16:44,480

cost-effective number of transistors

394

00:16:42,049 --> 00:16:46,009

that could fit onto a silicon chip this

395

00:16:44,480 --> 00:16:49,399

prediction is better known as Moore's

396

00:16:46,009 --> 00:16:51,409

law which states computing power doubles

397

00:16:49,399 --> 00:16:54,529

approximately every two years as

398

00:16:51,409 --> 00:16:56,149

transistors becomes smaller transistors

399

00:16:54,529 --> 00:16:57,879

are a miniature on/off switch that

400
00:16:56,149 --> 00:17:00,590
allows a computer to process information

401
00:16:57,879 --> 00:17:03,259
the first transistor was developed at

402
00:17:00,590 --> 00:17:05,240
Bell Laboratories in 1947 and was the

403
00:17:03,259 --> 00:17:06,920
size of a thumbnail although the

404
00:17:05,240 --> 00:17:09,920
supporting structure around it was the

405
00:17:06,920 --> 00:17:11,630
size of a hand since then transistors

406
00:17:09,920 --> 00:17:13,940
have been shrunk down to the nanometer

407
00:17:11,630 --> 00:17:16,070
scale meaning billions can now be

408
00:17:13,940 --> 00:17:20,299
crammed onto a single silicon chip the

409
00:17:16,069 --> 00:17:22,099
size of the original transistor however

410
00:17:20,299 --> 00:17:24,198
we may be nearing the end for Moore's

411
00:17:22,099 --> 00:17:26,719
law as transistors reach the minimum

412
00:17:24,199 --> 00:17:28,580
size possible scientists are already

413
00:17:26,720 --> 00:17:30,170
working on quantum techniques which will

414
00:17:28,579 --> 00:17:32,359
shrink computers to the size of

415
00:17:30,170 --> 00:17:34,490
molecules this is equivalent to

416
00:17:32,359 --> 00:17:37,250
squeezing today's supercomputers onto

417
00:17:34,490 --> 00:17:38,960
the head of a pin as a result expect

418
00:17:37,250 --> 00:17:41,000
your personal devices to be fully

419
00:17:38,960 --> 00:17:43,250
wearable with ultra long battery life

420
00:17:41,000 --> 00:17:45,559
and able to communicate with buildings

421
00:17:43,250 --> 00:17:47,900
roadways and other individuals nearby as

422
00:17:45,559 --> 00:17:49,669
a result voice commands and gestures

423
00:17:47,900 --> 00:17:52,220
will remove the need for screens and

424
00:17:49,670 --> 00:17:54,140
keypads it's also possible that the next

425
00:17:52,220 --> 00:17:55,970
generation of computers may be able to

426
00:17:54,140 --> 00:17:58,430
simulate human intelligence for the

427
00:17:55,970 --> 00:18:01,549
first time or even interface directly

428

00:17:58,430 --> 00:18:04,519
with the human brain and now for fast

429
00:18:01,549 --> 00:18:07,529
facts about shrinking technology

430
00:18:04,519 --> 00:18:10,289
sigh rack mark 1 a first-generation

431
00:18:07,529 --> 00:18:12,389
computer built in the 1940s is on

432
00:18:10,289 --> 00:18:14,519
display in the Melbourne Museum it

433
00:18:12,390 --> 00:18:17,700
occupies 40 square meters and weighs

434
00:18:14,519 --> 00:18:19,379
around two tons today the transistors on

435
00:18:17,700 --> 00:18:23,308
silicon chips are less than 30

436
00:18:19,380 --> 00:18:25,380
nanometers wide meaning over 2,500 would

437
00:18:23,308 --> 00:18:27,629
fit on the width of a human hair a

438
00:18:25,380 --> 00:18:29,760
modern transistor can turn on and off

439
00:18:27,630 --> 00:18:31,740
more than 1 billion times per second

440
00:18:29,759 --> 00:18:34,169
this is the equivalent of switching a

441
00:18:31,740 --> 00:18:37,490
light on and off 150 times per minute

442
00:18:34,169 --> 00:18:39,720

for 2,000 years based on moore's law

443

00:18:37,490 --> 00:18:41,099

futurists predict the computers will

444

00:18:39,720 --> 00:18:45,029

become more intelligent than humans

445

00:18:41,099 --> 00:18:47,069

between the years 20 30 and 20 40 that's

446

00:18:45,029 --> 00:18:49,259

it for this week in science for more

447

00:18:47,069 --> 00:18:53,428

information on shrinking technology go

448

00:18:49,259 --> 00:18:56,789

to the Arias website are I a US or gay

449

00:18:53,429 --> 00:18:59,669

you follow us on twitter at our IRS and

450

00:18:56,789 --> 00:19:02,690

like us on Facebook I'm tani Amaya and

451

00:18:59,669 --> 00:19:02,690

we'll catch you next week

452

00:19:07,259 --> 00:19:12,549

ad hominem begging the question factoid

453

00:19:10,420 --> 00:19:14,710

propagation false analogy false cause

454

00:19:12,549 --> 00:19:16,509

false dichotomy gibberish immunized

455

00:19:14,710 --> 00:19:18,069

hypothesis moral equivalence poison the

456

00:19:16,509 --> 00:19:20,650

well simple modern certitude stacking a

457
00:19:18,069 --> 00:19:22,599
deck and WTF are just some of the

458
00:19:20,650 --> 00:19:25,120
fallacies we provide real life examples

459
00:19:22,599 --> 00:19:28,980
of in hunting humbug 101 a podcast about

460
00:19:25,119 --> 00:19:47,859
bad arguments check it out at www.viki

461
00:19:28,980 --> 00:19:49,750
a.m. hi I'm sig McCain recently I

462
00:19:47,859 --> 00:19:52,719
published an article titled why you

463
00:19:49,750 --> 00:19:54,819
should not listen to anti-vaxxers here

464
00:19:52,720 --> 00:20:00,549
is my radio version specially for

465
00:19:54,819 --> 00:20:02,950
skeptics am most skeptics have come

466
00:20:00,549 --> 00:20:04,659
across conspiracy theorists the people

467
00:20:02,950 --> 00:20:06,610
who claim that lizard people are in

468
00:20:04,660 --> 00:20:08,920
charge of the world or that the moon

469
00:20:06,609 --> 00:20:10,959
landing never happened when you

470
00:20:08,920 --> 00:20:13,120
questioned their claims conspiracy

471
00:20:10,960 --> 00:20:15,250
theorists usually come up with a story

472
00:20:13,119 --> 00:20:18,639
that involves the authorities covering

473
00:20:15,250 --> 00:20:21,099
stuff up professor Stefan lewendusky a

474
00:20:18,640 --> 00:20:23,200
cognitive scientist at the University of

475
00:20:21,099 --> 00:20:25,419
Western Australia has described

476
00:20:23,200 --> 00:20:28,870
conspiracy theories as immune to

477
00:20:25,420 --> 00:20:31,330
evidence lemon dowski argues that if you

478
00:20:28,869 --> 00:20:33,069
reject evidence or reinterpret the

479
00:20:31,329 --> 00:20:35,889
evidence to be confirmation of your

480
00:20:33,069 --> 00:20:37,839
theory or you ignore mountains of

481
00:20:35,890 --> 00:20:41,800
evidence to focus on just one thing

482
00:20:37,839 --> 00:20:43,509
you're probably a conspiracy theorist we

483
00:20:41,799 --> 00:20:45,250
all know that it's great to maintain a

484
00:20:43,509 --> 00:20:48,369
healthy dose of skepticism be

485

00:20:45,250 --> 00:20:50,230
open-minded and think critically but

486
00:20:48,369 --> 00:20:52,419
conspiratorial thinking crosses that

487
00:20:50,230 --> 00:20:56,019
line and wanders off into a paranoid

488
00:20:52,420 --> 00:20:58,029
world where nobody can be trusted the

489
00:20:56,019 --> 00:20:59,920
harmless flavor of a conspiracy theorist

490
00:20:58,029 --> 00:21:01,299
will try to convince you about lizard

491
00:20:59,920 --> 00:21:04,360
people while you're having drinks at a

492
00:21:01,299 --> 00:21:06,759
pub but unfortunately others spread

493
00:21:04,359 --> 00:21:08,469
dangerous misinformation about important

494
00:21:06,759 --> 00:21:11,309
public health issues such as

495
00:21:08,470 --> 00:21:11,309
vaccinations

496
00:21:12,809 --> 00:21:17,639
associate professor guy aslak is a

497
00:21:15,339 --> 00:21:20,230
researcher from the university of sydney

498
00:21:17,640 --> 00:21:22,390
recently he led a comprehensive review

499
00:21:20,230 --> 00:21:25,779

studies looking at the link between

500

00:21:22,390 --> 00:21:28,600

vaccines and autism the conclusion put

501

00:21:25,779 --> 00:21:31,029

it plain and simple there is no evidence

502

00:21:28,599 --> 00:21:33,519

to support the claim that autism is

503

00:21:31,029 --> 00:21:36,039

caused by vaccines of course this

504

00:21:33,519 --> 00:21:38,170

conclusion is hardly surprising but we

505

00:21:36,039 --> 00:21:40,359

all know that militant anti-vaccination

506

00:21:38,170 --> 00:21:43,450

campaigners have been claiming the link

507

00:21:40,359 --> 00:21:45,459

exists for decades and now even in the

508

00:21:43,450 --> 00:21:48,069

light of comprehensive research showing

509

00:21:45,460 --> 00:21:51,579

the opposite anti-vaxxers are still

510

00:21:48,069 --> 00:21:53,950

refusing to let the myth go furthermore

511

00:21:51,579 --> 00:21:56,559

a similar attitude emerges when they

512

00:21:53,950 --> 00:21:58,799

face any other data contradicting their

513

00:21:56,559 --> 00:22:02,769

belief that vaccines are unsafe

514
00:21:58,799 --> 00:22:06,029
unnecessary and do not work so why is it

515
00:22:02,769 --> 00:22:08,799
so hard to change an anti-vaxxers mind

516
00:22:06,029 --> 00:22:10,720
after all they claim to be presenting

517
00:22:08,799 --> 00:22:12,609
information in the interest of parents

518
00:22:10,720 --> 00:22:15,730
who want to make an informed choice

519
00:22:12,609 --> 00:22:17,709
about vaccines you'd think they would

520
00:22:15,730 --> 00:22:21,000
welcome evidence that shows vaccines are

521
00:22:17,710 --> 00:22:21,000
actually not that bad

522
00:22:23,859 --> 00:22:29,750
unfortunately an anti vector is really

523
00:22:26,750 --> 00:22:31,700
just a conspiracy theorist some of them

524
00:22:29,750 --> 00:22:34,309
even admit they would not change their

525
00:22:31,700 --> 00:22:36,170
mind in light of any evidence others

526
00:22:34,309 --> 00:22:37,970
keep shifting the goal post until the

527
00:22:36,170 --> 00:22:41,150
prove their demand is impossible to

528
00:22:37,970 --> 00:22:43,940
provide to me this is the crux of the

529
00:22:41,150 --> 00:22:46,040
issue you can't tackle a conspiracy

530
00:22:43,940 --> 00:22:47,930
theorist with facts or evidence it's

531
00:22:46,039 --> 00:22:49,940
because their logic prevents them from

532
00:22:47,930 --> 00:22:52,850
taking into account anything that

533
00:22:49,940 --> 00:22:55,039
contradicts their worldview in fact

534
00:22:52,849 --> 00:22:57,619
lewendusky and his colleagues have

535
00:22:55,039 --> 00:23:00,289
outlined six criteria for conspiratorial

536
00:22:57,619 --> 00:23:03,739
thinking and most of those apply to

537
00:23:00,289 --> 00:23:06,859
anti-vaxxers here's how the first

538
00:23:03,740 --> 00:23:09,200
criterion is nefarious intent the belief

539
00:23:06,859 --> 00:23:12,319
that presumed conspirators have evil

540
00:23:09,200 --> 00:23:14,210
intentions for anti-vaxxers this usually

541
00:23:12,319 --> 00:23:17,119
goes along the lines of Big Pharma

542

00:23:14,210 --> 00:23:19,180
killing babies for money similar

543
00:23:17,119 --> 00:23:21,979
narratives include careless doctors

544
00:23:19,180 --> 00:23:24,230
incompetent health authorities research

545
00:23:21,980 --> 00:23:27,200
fraud and other explanations for why

546
00:23:24,230 --> 00:23:30,349
nobody believes that vaccines are bad in

547
00:23:27,200 --> 00:23:32,330
other words every health official is in

548
00:23:30,349 --> 00:23:36,139
on it and the people who don't see this

549
00:23:32,329 --> 00:23:38,539
are fools the next criterion is the

550
00:23:36,140 --> 00:23:41,060
perception of oneself as a persecuted

551
00:23:38,539 --> 00:23:43,549
victim and sure enough if you think

552
00:23:41,059 --> 00:23:45,349
about it anti-vaxxers are usually quick

553
00:23:43,549 --> 00:23:47,899
to complain about suppression of the

554
00:23:45,349 --> 00:23:50,119
truth they have discovered particularly

555
00:23:47,900 --> 00:23:52,040
when health authorities issue warnings

556
00:23:50,119 --> 00:23:55,729

about misleading atty vaccination

557

00:23:52,039 --> 00:23:58,639

campaigns the next criterion that fits

558

00:23:55,730 --> 00:24:01,069

the bill is nihilistic skepticism the

559

00:23:58,640 --> 00:24:03,020

attitude anti-vaxxers show when they

560

00:24:01,069 --> 00:24:06,309

refuse to believe in anything that

561

00:24:03,019 --> 00:24:08,690

doesn't fit their theory and lastly

562

00:24:06,309 --> 00:24:10,909

self-sealing reasoning means that any

563

00:24:08,690 --> 00:24:14,029

evidence against the conspiracy is

564

00:24:10,910 --> 00:24:16,279

interpreted as evidence for it this is

565

00:24:14,029 --> 00:24:18,950

exactly what anti-vaxxers do when they

566

00:24:16,279 --> 00:24:20,960

face a study like s lac's they claim the

567

00:24:18,950 --> 00:24:23,330

data has been cherry-pick the author has

568

00:24:20,960 --> 00:24:25,430

vested interest the university of sydney

569

00:24:23,329 --> 00:24:29,059

received new lab equipment for running

570

00:24:25,430 --> 00:24:31,519

this research and so on and so forth you

571
00:24:29,059 --> 00:24:34,099
can't debate a conspiracy theorist using

572
00:24:31,519 --> 00:24:36,170
evidence and reason it's absolutely

573
00:24:34,099 --> 00:24:37,189
crucial to realize this when faced with

574
00:24:36,170 --> 00:24:40,190
claims by aunty

575
00:24:37,190 --> 00:24:47,480
vaccination campaigners anti-vaxxers are

576
00:24:40,190 --> 00:24:50,750
immune to evidence and you know what

577
00:24:47,480 --> 00:24:52,610
it's really disappointing we need

578
00:24:50,750 --> 00:24:54,940
watchdogs for the medical industry as

579
00:24:52,609 --> 00:24:57,469
much as we need them anywhere else

580
00:24:54,940 --> 00:24:59,720
vaccines are not without risks but they

581
00:24:57,470 --> 00:25:01,910
do prevent diseases and yes

582
00:24:59,720 --> 00:25:04,160
pharmaceutical companies are known to

583
00:25:01,910 --> 00:25:07,100
engage in shoddy and sometimes unethical

584
00:25:04,160 --> 00:25:09,080
practices manufacturing mistakes also

585
00:25:07,099 --> 00:25:12,529
happen and people can be harmed by

586
00:25:09,079 --> 00:25:14,720
medications but it is crucial that the

587
00:25:12,529 --> 00:25:16,250
discussion of these issues is done in a

588
00:25:14,720 --> 00:25:19,819
rational environment that encourages

589
00:25:16,250 --> 00:25:22,819
real debate and bases arguments on solid

590
00:25:19,819 --> 00:25:25,250
evidence not with militant activists who

591
00:25:22,819 --> 00:25:29,119
refuse to accept anything that won't fit

592
00:25:25,250 --> 00:25:31,849
their narrative scientists make mistakes

593
00:25:29,119 --> 00:25:34,339
and correct them but you can't expect a

594
00:25:31,849 --> 00:25:46,069
conspiracy theorist to admit they are

595
00:25:34,339 --> 00:25:48,879
wrong hey guys Jay novela here simple

596
00:25:46,069 --> 00:25:51,200
question where will you be this November

597
00:25:48,880 --> 00:25:52,790
because I know I'm going to be at the

598
00:25:51,200 --> 00:25:54,860
Australian skeptics National Convention

599

00:25:52,789 --> 00:25:55,940
in Sydney and so will all the rest of us

600
00:25:54,859 --> 00:25:58,879
from the skeptics guide to the universe

601
00:25:55,940 --> 00:26:01,309
including George Rob and Dick Smith and

602
00:25:58,880 --> 00:26:03,710
dr. Karl and dr. Reggie and lots of

603
00:26:01,309 --> 00:26:05,809
other awesome people why aren't you

604
00:26:03,710 --> 00:26:07,519
going did you not sign up yet get on

605
00:26:05,809 --> 00:26:08,899
there and sign up this is going to be

606
00:26:07,519 --> 00:26:12,470
some epic stuff here you don't want to

607
00:26:08,900 --> 00:26:15,700
miss it go to skeptics com au forward

608
00:26:12,470 --> 00:26:15,700
slash convention

609
00:26:19,190 --> 00:26:26,920
what we want is some more evidence

610
00:26:21,740 --> 00:26:26,920
please is Joe alabaster

611
00:26:30,609 --> 00:26:36,709
hello this is Joe alabasta

612
00:26:34,119 --> 00:26:37,969
this week I'd like to talk about some of

613
00:26:36,710 --> 00:26:40,610

the strange claims that I encountered

614

00:26:37,970 --> 00:26:44,058

and curious advice that I was given as I

615

00:26:40,609 --> 00:26:45,919

entered the world of parenthood when my

616

00:26:44,058 --> 00:26:47,779

partner and I decided to try to conceive

617

00:26:45,920 --> 00:26:50,269

we went public about it and didn't face

618

00:26:47,779 --> 00:26:52,160

any fertility troubles so thankfully I

619

00:26:50,269 --> 00:26:53,990

avoided having to negotiate any of the

620

00:26:52,160 --> 00:26:55,340

myths or questionable treatments that

621

00:26:53,990 --> 00:26:57,920

hopeful parents are prone to

622

00:26:55,339 --> 00:27:00,500

encountering there are plenty out liver

623

00:26:57,920 --> 00:27:01,820

from old wives tale such as having a

624

00:27:00,500 --> 00:27:03,890

woman hauled her legs up in the air

625

00:27:01,819 --> 00:27:06,139

after qui t'as having her quaff

626

00:27:03,890 --> 00:27:08,000

grapefruit juice or sitting in the chair

627

00:27:06,140 --> 00:27:09,710

of a woman who is pregnant to

628
00:27:08,000 --> 00:27:11,200
naturopathy acupuncture another

629
00:27:09,710 --> 00:27:13,759
traditional Chinese medicine

630
00:27:11,200 --> 00:27:17,120
chiropractic hypnotherapy and homeopathy

631
00:27:13,759 --> 00:27:19,099
treatments infertility affects 1 in 6

632
00:27:17,119 --> 00:27:21,428
Australian couples and as such this

633
00:27:19,099 --> 00:27:22,909
strong market for alternative medicine

634
00:27:21,429 --> 00:27:24,620
fortunately there are also

635
00:27:22,910 --> 00:27:27,080
evidence-based investigations

636
00:27:24,619 --> 00:27:29,209
recommendations and treatments so a trip

637
00:27:27,079 --> 00:27:30,949
to the GP for a chat and a referral can

638
00:27:29,210 --> 00:27:34,160
be a fruitful option for people who are

639
00:27:30,950 --> 00:27:36,080
experiencing trouble conceiving there

640
00:27:34,160 --> 00:27:37,820
are also many myths which claim that you

641
00:27:36,079 --> 00:27:40,490
can influence which sex your child will

642
00:27:37,819 --> 00:27:42,798
be some people recommending switching to

643
00:27:40,490 --> 00:27:44,690
a so-called acidifying diet which is

644
00:27:42,798 --> 00:27:47,619
supposed to cause the physiologically

645
00:27:44,690 --> 00:27:49,610
impossible act of killing off male sperm

646
00:27:47,619 --> 00:27:52,459
trying to conceive in particular

647
00:27:49,609 --> 00:27:55,418
positions timing conception based on

648
00:27:52,460 --> 00:27:58,329
ovulation mood or time of day and

649
00:27:55,419 --> 00:28:00,919
gorging on chocolate to have a go off

650
00:27:58,329 --> 00:28:03,048
one particularly persistent myth is the

651
00:28:00,919 --> 00:28:04,730
timing conception based on the mother's

652
00:28:03,048 --> 00:28:07,069
date of birth and the chinese lunar

653
00:28:04,730 --> 00:28:09,919
calendar can result in having either a

654
00:28:07,069 --> 00:28:11,480
boy or a girl I just had a quick peek at

655
00:28:09,919 --> 00:28:13,580
the charts which have informed me that

656

00:28:11,480 --> 00:28:15,048
my son was supposed to be a girl and my

657
00:28:13,579 --> 00:28:17,589
daughter was meant to be a boy but

658
00:28:15,048 --> 00:28:19,849
frankly it's pretty much a 50-50 shot

659
00:28:17,589 --> 00:28:21,439
children with intersex conditions don't

660
00:28:19,849 --> 00:28:23,048
need to be acknowledged by the system

661
00:28:21,440 --> 00:28:26,000
and my results are statistically

662
00:28:23,048 --> 00:28:27,019
irrelevant as other results of those who

663
00:28:26,000 --> 00:28:31,009
have had hits from this system

664
00:28:27,019 --> 00:28:33,139
experience confirmation bias back to

665
00:28:31,009 --> 00:28:35,269
evidence-based medicine it is

666
00:28:33,140 --> 00:28:36,980
recommended that women take folic acid

667
00:28:35,269 --> 00:28:39,440
supplements for at least one month prior

668
00:28:36,980 --> 00:28:41,960
to conceiving then for the first three

669
00:28:39,440 --> 00:28:44,570
months of pregnancy research has shown

670
00:28:41,960 --> 00:28:46,490

that an adequate intake of fallout 600

671

00:28:44,569 --> 00:28:47,769
micrograms per day in the Perry

672

00:28:46,490 --> 00:28:49,720
conceptional period

673

00:28:47,769 --> 00:28:51,490
has the capacity to prevent seventy

674

00:28:49,720 --> 00:28:54,759
percent of all cases of neural tube

675

00:28:51,490 --> 00:28:56,829
defects additionally adequate iodine is

676

00:28:54,759 --> 00:28:59,200
critical for the gestating fetuses brain

677

00:28:56,829 --> 00:29:00,970
development and iodine deficiency is

678

00:28:59,200 --> 00:29:03,700
widespread across the population in

679

00:29:00,970 --> 00:29:06,789
general as such 150 micrograms

680

00:29:03,700 --> 00:29:08,830
supplement is recommended so when I was

681

00:29:06,789 --> 00:29:10,750
trying to conceive and for the first few

682

00:29:08,829 --> 00:29:13,389
weeks of my pregnancies I took

683

00:29:10,750 --> 00:29:15,099
supplements much to my charger and

684

00:29:13,390 --> 00:29:17,410
there's heading to the vitamin aisle of

685
00:29:15,099 --> 00:29:19,449
my pharmacy and selecting something made

686
00:29:17,410 --> 00:29:21,490
by a company who also sold will have

687
00:29:19,450 --> 00:29:23,980
unnecessary and potentially harmful

688
00:29:21,490 --> 00:29:25,720
supplements but you do what you've got

689
00:29:23,980 --> 00:29:27,670
to do and this certainly wasn't the

690
00:29:25,720 --> 00:29:30,130
first time I've compromised my skeptical

691
00:29:27,670 --> 00:29:32,860
sensibilities in a pharmacy early

692
00:29:30,130 --> 00:29:34,840
pregnancy is an exciting time I chose

693
00:29:32,859 --> 00:29:36,939
not to go public before my first 12-week

694
00:29:34,839 --> 00:29:38,949
scan but I did join an online parenting

695
00:29:36,940 --> 00:29:41,769
forum to connect with other women who

696
00:29:38,950 --> 00:29:43,120
were having similar experiences I chose

697
00:29:41,769 --> 00:29:44,950
the one which appeared to be the least

698
00:29:43,119 --> 00:29:46,599
worm-infested but goodness it's a

699
00:29:44,950 --> 00:29:48,970
minefield of anecdote and belief out

700
00:29:46,599 --> 00:29:51,129
there I was very lucky with the birth

701
00:29:48,970 --> 00:29:52,990
group I became involved with the women

702
00:29:51,130 --> 00:29:54,640
were lovely or rather sensible by my

703
00:29:52,990 --> 00:29:58,660
reckoning and very supportive of one

704
00:29:54,640 --> 00:30:00,190
another many of us myself included were

705
00:29:58,660 --> 00:30:01,840
hit with varying degrees of the

706
00:30:00,190 --> 00:30:04,570
comically missed named morning sickness

707
00:30:01,839 --> 00:30:07,480
throughout our first trimesters for me

708
00:30:04,569 --> 00:30:09,039
attended to last all day I got through

709
00:30:07,480 --> 00:30:10,509
it by eating small simple meals

710
00:30:09,039 --> 00:30:12,819
throughout the day and nibbling on

711
00:30:10,509 --> 00:30:14,680
crystallized ginger which has been shown

712
00:30:12,819 --> 00:30:16,089
to be effective in treating symptoms of

713

00:30:14,680 --> 00:30:18,789
morning sickness in randomized

714
00:30:16,089 --> 00:30:20,259
controlled trials I've known of other

715
00:30:18,789 --> 00:30:22,619
women who have tried acupressure

716
00:30:20,259 --> 00:30:25,000
acupuncture traditional chinese medicine

717
00:30:22,619 --> 00:30:27,219
rescue remedy and other unproven

718
00:30:25,000 --> 00:30:29,410
treatments and certainly some felt that

719
00:30:27,220 --> 00:30:31,390
these helped I'll note that mild morning

720
00:30:29,410 --> 00:30:33,490
sickness can certainly be influenced by

721
00:30:31,390 --> 00:30:36,640
the placebo effect though and it is

722
00:30:33,490 --> 00:30:39,849
generally self-limiting if it's bad chat

723
00:30:36,640 --> 00:30:41,740
to your GP or obstetrician there are a

724
00:30:39,849 --> 00:30:44,199
few old wives tales around which clone

725
00:30:41,740 --> 00:30:46,299
ways to predict the baby's gender from

726
00:30:44,200 --> 00:30:48,549
the shape of the bump to dowsing using a

727
00:30:46,299 --> 00:30:50,589

wedding ring tied to a string the

728

00:30:48,549 --> 00:30:52,950

reliable way to find out however should

729

00:30:50,589 --> 00:30:55,119

you want to is via ultrasound

730

00:30:52,950 --> 00:30:57,610

occasionally the sex is apparent at a

731

00:30:55,119 --> 00:31:00,268

12-week nuchal translucency scan which

732

00:30:57,609 --> 00:31:02,668

is used in conjunction with a blood test

733

00:31:00,269 --> 00:31:04,229

and risk factors for Down syndrome but

734

00:31:02,669 --> 00:31:06,719

if the sonographer is unable to make the

735

00:31:04,229 --> 00:31:09,989

call then the 20-week fetal morphology

736

00:31:06,719 --> 00:31:12,088

scan should reveal all regarding

737

00:31:09,989 --> 00:31:14,429

ultrasounds I was rather surprised to

738

00:31:12,088 --> 00:31:16,678

discover that some people opted not to

739

00:31:14,429 --> 00:31:18,089

have them at all sometimes because they

740

00:31:16,679 --> 00:31:19,739

wish to take her whatever will be will

741

00:31:18,088 --> 00:31:21,958

be approached to the health of the baby

742
00:31:19,739 --> 00:31:23,879
they're carrying which been quite the

743
00:31:21,959 --> 00:31:26,399
fan of being informed and prepared as

744
00:31:23,878 --> 00:31:27,928
difficult for me to understand sometimes

745
00:31:26,398 --> 00:31:29,908
because of the mistaken belief that

746
00:31:27,929 --> 00:31:32,579
ultrasounds could potentially cause harm

747
00:31:29,909 --> 00:31:34,769
to a fetus ultrasound imaging as

748
00:31:32,578 --> 00:31:36,690
precisely as it sounds high-frequency

749
00:31:34,769 --> 00:31:38,548
sound waves which bounced against

750
00:31:36,690 --> 00:31:40,889
different tissues creating an image

751
00:31:38,548 --> 00:31:42,569
based on the return of the echos there

752
00:31:40,888 --> 00:31:44,668
is no evidence that ultrasounds have

753
00:31:42,569 --> 00:31:46,798
ever caused harm nor any plausible

754
00:31:44,669 --> 00:31:48,509
mechanism by which they called when used

755
00:31:46,798 --> 00:31:50,668
within the guidelines for obstetric

756
00:31:48,509 --> 00:31:52,979
imaging yet in some sectors of the

757
00:31:50,669 --> 00:31:54,419
community affair persists one which

758
00:31:52,979 --> 00:31:56,129
causes people to forgo learning

759
00:31:54,419 --> 00:31:59,489
potentially important information about

760
00:31:56,128 --> 00:32:01,378
their developing child's health during

761
00:31:59,489 --> 00:32:03,538
my pregnancies my diet seemed to be of

762
00:32:01,378 --> 00:32:05,158
great interest to some people I stuck to

763
00:32:03,538 --> 00:32:06,898
the New South Wales food Authority's

764
00:32:05,159 --> 00:32:09,269
pregnancy and food safety guidelines

765
00:32:06,898 --> 00:32:11,338
which suggests a balanced diet which

766
00:32:09,269 --> 00:32:13,528
provides optimal maternal nutrition and

767
00:32:11,338 --> 00:32:15,569
foods to avoid to reduce the risk of

768
00:32:13,528 --> 00:32:17,909
consuming pathogens which can cause

769
00:32:15,569 --> 00:32:20,700
risks during pregnancy such as Listeria

770

00:32:17,909 --> 00:32:22,769
Salmonella and toxoplasmosis I also

771
00:32:20,700 --> 00:32:24,959
avoided alcohol and in consultation with

772
00:32:22,769 --> 00:32:27,149
my doctor cut down my coffee consumption

773
00:32:24,959 --> 00:32:29,278
to no more than two cups of weak instant

774
00:32:27,148 --> 00:32:32,098
coffee a day this being the most radical

775
00:32:29,278 --> 00:32:33,929
dietary change I undertook it was around

776
00:32:32,098 --> 00:32:35,578
this time but I began to hear what is

777
00:32:33,929 --> 00:32:38,219
humorously dubbed the mother-in-law

778
00:32:35,578 --> 00:32:41,128
fallacy I hate soft cheeses during my

779
00:32:38,219 --> 00:32:43,440
pregnancy and my kids turned out okay it

780
00:32:41,128 --> 00:32:44,908
can take many forms somebody drunk

781
00:32:43,440 --> 00:32:46,798
alcohol through their pregnancies and

782
00:32:44,909 --> 00:32:48,089
their kids were fine somebody didn't

783
00:32:46,798 --> 00:32:49,618
take four light supplements throughout

784
00:32:48,088 --> 00:32:51,598

their pregnancy and their kids were fine

785

00:32:49,618 --> 00:32:54,148

somebody had a home birth and they were

786

00:32:51,598 --> 00:32:56,428

fine which is good I want everybody to

787

00:32:54,148 --> 00:32:58,439

be fine however a small amount of

788

00:32:56,429 --> 00:33:00,690

anecdotal evidence is not enough to draw

789

00:32:58,440 --> 00:33:02,548

conclusions on and I was continually

790

00:33:00,690 --> 00:33:04,109

surprised that people seem to feel that

791

00:33:02,548 --> 00:33:06,898

I should just trust their experience

792

00:33:04,108 --> 00:33:08,939

over medical advice people with a great

793

00:33:06,898 --> 00:33:11,069

deal of expertise in obstetric medicine

794

00:33:08,940 --> 00:33:12,778

calculate risks by assessing all

795

00:33:11,069 --> 00:33:13,829

available knowledge in their field and

796

00:33:12,778 --> 00:33:16,019

make recommendation

797

00:33:13,829 --> 00:33:17,609

is based on such they're summarized in

798

00:33:16,019 --> 00:33:19,558

handy little booklets and I'm quite

799

00:33:17,609 --> 00:33:20,969

inclined to follow them and honestly

800

00:33:19,558 --> 00:33:22,528

whatever the risk it was no great

801

00:33:20,970 --> 00:33:24,720

sacrifice in the grand scheme of things

802

00:33:22,528 --> 00:33:26,940

to go up sushi for 42 weeks at a time

803

00:33:24,720 --> 00:33:28,798

and the glory of a postpartum sushi

804

00:33:26,940 --> 00:33:30,600

binges worth the wait even if the

805

00:33:28,798 --> 00:33:32,750

chances of my consuming dodgy sushi

806

00:33:30,599 --> 00:33:34,769

during pregnancy were negligible I

807

00:33:32,750 --> 00:33:36,720

really don't have the time to properly

808

00:33:34,769 --> 00:33:38,250

address the anti obstetric sentiment

809

00:33:36,720 --> 00:33:40,048

that eyewitness coming from some women

810

00:33:38,250 --> 00:33:42,179

who felt that childbirth was too

811

00:33:40,048 --> 00:33:44,308

medicalized and that it is a natural

812

00:33:42,179 --> 00:33:46,350

function that our bodies are capable of

813
00:33:44,308 --> 00:33:48,778
getting through unassisted or perhaps

814
00:33:46,349 --> 00:33:52,048
supported by a home Midwife or doula I

815
00:33:48,778 --> 00:33:54,778
will say though that yes pregnancy and

816
00:33:52,048 --> 00:33:57,509
childbirth are perfectly natural sadly

817
00:33:54,778 --> 00:33:59,339
saw a maternal and infant deaths my

818
00:33:57,509 --> 00:34:01,200
second pregnancy was declared to be low

819
00:33:59,339 --> 00:34:03,359
risk and I'm quite sure that had I

820
00:34:01,200 --> 00:34:05,850
wanted to I could have sought out a home

821
00:34:03,359 --> 00:34:07,558
Midwife to attend a home birth had I

822
00:34:05,849 --> 00:34:10,049
done this I would likely have bled to

823
00:34:07,558 --> 00:34:13,019
death as I experienced an unexpected

824
00:34:10,050 --> 00:34:14,609
postpartum hemorrhage the conduct of

825
00:34:13,019 --> 00:34:17,190
some obstetricians is not above

826
00:34:14,608 --> 00:34:18,719
criticism of course but to shun access

827

00:34:17,190 --> 00:34:20,760
to medical assistance should it be

828
00:34:18,719 --> 00:34:23,098
needed in favor of more natural birthing

829
00:34:20,760 --> 00:34:24,659
experience stuns me I can only assume

830
00:34:23,099 --> 00:34:27,269
that these decisions are based on a

831
00:34:24,659 --> 00:34:29,369
accurate risk assessment for a more

832
00:34:27,269 --> 00:34:31,588
detailed examination of no intervention

833
00:34:29,369 --> 00:34:33,480
and home birthing movements I'd suggest

834
00:34:31,588 --> 00:34:35,639
a raid of dr. Amy tutors blog The

835
00:34:33,480 --> 00:34:37,710
Skeptical obey be warned though there

836
00:34:35,639 --> 00:34:41,099
are some incredibly sad stories of home

837
00:34:37,710 --> 00:34:42,628
births with tragic consequences a more

838
00:34:41,099 --> 00:34:44,849
generalized sentiment that seems to

839
00:34:42,628 --> 00:34:47,250
permeate mothering groups is that of the

840
00:34:44,849 --> 00:34:49,080
appeal to nature fallacy from conception

841
00:34:47,250 --> 00:34:52,260

to breastfeeding to organic baby food

842

00:34:49,079 --> 00:34:54,358

and extreme cases a rejection of modern

843

00:34:52,260 --> 00:34:57,420

medical science resulting in vaccine and

844

00:34:54,358 --> 00:34:59,489

medication refusal the archetype of the

845

00:34:57,420 --> 00:35:01,440

natural mother is a powerful one which

846

00:34:59,489 --> 00:35:04,139

many women find appealing and a worthy

847

00:35:01,440 --> 00:35:06,269

aspiration she is wires nurturing and

848

00:35:04,139 --> 00:35:09,059

intuitive and indeed there's equalities

849

00:35:06,269 --> 00:35:10,949

that I myself a spot to unfortunately

850

00:35:09,059 --> 00:35:12,929

though some people's intuition tells

851

00:35:10,949 --> 00:35:15,329

them to reject evidence-based practices

852

00:35:12,929 --> 00:35:18,659

in medicine the adage that mother knows

853

00:35:15,329 --> 00:35:20,179

best is sadly not always accurate I hope

854

00:35:18,659 --> 00:35:22,649

that you found this report interesting

855

00:35:20,179 --> 00:35:25,739

next week I'll be discussing induction

856
00:35:22,650 --> 00:35:26,950
birth lactation colic vaccination and

857
00:35:25,739 --> 00:35:28,959
teasing

858
00:35:26,949 --> 00:35:30,429
making a terrible confession about some

859
00:35:28,960 --> 00:35:32,829
dodgy pseudoscience that my

860
00:35:30,429 --> 00:35:36,569
sleep-deprived postpartum brain briefly

861
00:35:32,829 --> 00:35:36,570
fell for stay tuned

862
00:35:45,239 --> 00:35:50,559
but gasps yours is an award-winning

863
00:35:47,710 --> 00:35:53,559
weekly science show in French hosted by

864
00:35:50,559 --> 00:35:55,840
a bunch of crazy enthusiasts we are

865
00:35:53,559 --> 00:35:58,210
convinced that the greatest ideas in

866
00:35:55,840 --> 00:36:00,430
science are quite easy to grasp as long

867
00:35:58,210 --> 00:36:03,010
as they are presented with passion using

868
00:36:00,429 --> 00:36:05,169
a vocabulary common to all curious minds

869
00:36:03,010 --> 00:36:07,960
whatever their academic background if

870
00:36:05,170 --> 00:36:10,960
any you don't understand French yet oh

871
00:36:07,960 --> 00:36:12,849
it's never too late all our stories have

872
00:36:10,960 --> 00:36:14,619
a written transcript on the website and

873
00:36:12,849 --> 00:36:16,750
people from all around the world are

874
00:36:14,619 --> 00:36:19,869
using our content to learn Maria's

875
00:36:16,750 --> 00:36:22,119
language our topics range from 0 to

876
00:36:19,869 --> 00:36:24,639
infinity from evolution to artificial

877
00:36:22,119 --> 00:36:27,279
life from electromagnetism to the

878
00:36:24,639 --> 00:36:30,489
science of introverts we just love

879
00:36:27,280 --> 00:36:33,310
mathematics science critical thinking so

880
00:36:30,489 --> 00:36:34,989
do you want to join you can subscribe to

881
00:36:33,309 --> 00:36:37,690
the podcast for free from our website

882
00:36:34,989 --> 00:36:40,359
podcast science tops FM that's in one

883
00:36:37,690 --> 00:36:43,030
word you also find us on itunes and

884

00:36:40,360 --> 00:36:44,740
soundcloud see you soon hopefully I'd

885
00:36:43,030 --> 00:36:47,280
lose a year at the other words up

886
00:36:44,739 --> 00:36:47,279
against yours

887
00:37:00,380 --> 00:37:06,510
well hello there everybody out there

888
00:37:03,119 --> 00:37:10,380
skeptical and this is dr. Chrissy Wilson

889
00:37:06,510 --> 00:37:14,280
coming to you from a very sunny London

890
00:37:10,380 --> 00:37:17,640
I'm here on an extended holiday and it's

891
00:37:14,280 --> 00:37:19,740
actually friday the 13th today so I hope

892
00:37:17,639 --> 00:37:22,949
you all back there 11,000 miles away and

893
00:37:19,739 --> 00:37:26,068
around the globe having a very happy and

894
00:37:22,949 --> 00:37:28,108
lucky five year 13 not that we believe

895
00:37:26,068 --> 00:37:30,179
in such things of course but I've got

896
00:37:28,108 --> 00:37:34,019
some good fortune to tell you about I've

897
00:37:30,179 --> 00:37:36,598
recently found out that a book that I

898
00:37:34,019 --> 00:37:39,179

contributed to has just been published

899

00:37:36,599 --> 00:37:41,539

it's just come out in print I'd like to

900

00:37:39,179 --> 00:37:45,149

tell you about it it's it's called the

901

00:37:41,539 --> 00:37:48,779

survival hypothesis published by

902

00:37:45,150 --> 00:37:53,160

McFarlane press and edited by dr. Adam

903

00:37:48,780 --> 00:37:56,010

rock and it's a collection of essays and

904

00:37:53,159 --> 00:37:58,368

various contributions from a range of

905

00:37:56,010 --> 00:38:00,690

academics psychologists and

906

00:37:58,369 --> 00:38:04,470

parapsychologists on the state of

907

00:38:00,690 --> 00:38:08,309

research into the idea of consciousness

908

00:38:04,469 --> 00:38:11,159

surviving death specifically it's

909

00:38:08,309 --> 00:38:15,179

looking at the scientific evidence for

910

00:38:11,159 --> 00:38:18,059

mediumship now Adam approached me and

911

00:38:15,179 --> 00:38:21,719

asked me if I would like to contribute a

912

00:38:18,059 --> 00:38:24,568

chapter to give a skeptics view the

913
00:38:21,719 --> 00:38:28,608
whole book is essentially a group of

914
00:38:24,568 --> 00:38:31,739
essays that are somewhat sympathetic

915
00:38:28,608 --> 00:38:33,358
towards the idea that mediumship is real

916
00:38:31,739 --> 00:38:35,759
it's very much coming from a Paris

917
00:38:33,358 --> 00:38:37,949
psychological perspective which as you

918
00:38:35,760 --> 00:38:40,200
will all know is very sympathetic cept

919
00:38:37,949 --> 00:38:44,039
sympathetic towards the idea that sigh

920
00:38:40,199 --> 00:38:46,529
and psychic powers etc are real and

921
00:38:44,039 --> 00:38:49,679
testable so they've asked me to give a

922
00:38:46,530 --> 00:38:52,260
skeptics view now to be further Adam he

923
00:38:49,679 --> 00:38:55,649
has attempted to get a nice range of

924
00:38:52,260 --> 00:38:58,560
approaches and views so you've got

925
00:38:55,650 --> 00:39:01,858
essays for example on a qualitative

926
00:38:58,559 --> 00:39:03,219
approach to mediumship so what people

927

00:39:01,858 --> 00:39:05,619

actually say about how

928

00:39:03,219 --> 00:39:07,659

what they believe as far as mediumship

929

00:39:05,619 --> 00:39:13,269

is concerned they've got mixed designs

930

00:39:07,659 --> 00:39:16,358

they've got a laboratory research and

931

00:39:13,269 --> 00:39:18,489

and empirical evidence from from

932

00:39:16,358 --> 00:39:20,440

laboratory studies that even got a

933

00:39:18,489 --> 00:39:23,949

chapter on neuroscience the the

934

00:39:20,440 --> 00:39:27,220

neuroscience relating to mediumship so

935

00:39:23,949 --> 00:39:29,858

my particular contribution focuses on

936

00:39:27,219 --> 00:39:34,779

two particular areas number one I've

937

00:39:29,858 --> 00:39:37,569

given a fairly fairly abrupt critical

938

00:39:34,780 --> 00:39:41,619

appraisal of the research literature

939

00:39:37,570 --> 00:39:43,780

from the parapsychologists and I mean

940

00:39:41,619 --> 00:39:47,019

this is not new you know there were a

941

00:39:43,780 --> 00:39:50,380
lot of studies done way back in the 70s

942
00:39:47,019 --> 00:39:53,320
and 80s mostly carried out like a team

943
00:39:50,380 --> 00:39:56,170
led by someone called Gary Schwartz who

944
00:39:53,320 --> 00:39:59,080
did a bunch of studies attempting to

945
00:39:56,170 --> 00:40:01,420
show that mediumship was real and he did

946
00:39:59,079 --> 00:40:07,239
some studies in the laboratory with

947
00:40:01,420 --> 00:40:09,909
various psychics and it was given a huge

948
00:40:07,239 --> 00:40:13,108
amount of media coverage when when these

949
00:40:09,909 --> 00:40:16,598
findings came out and not surprisingly

950
00:40:13,108 --> 00:40:19,750
skeptics people such as Wiseman and ray

951
00:40:16,599 --> 00:40:25,150
hyman looked at the work and looked at

952
00:40:19,750 --> 00:40:27,969
the methodological descriptions of the

953
00:40:25,150 --> 00:40:29,619
studies and the interpretations of their

954
00:40:27,969 --> 00:40:31,598
results and actually came two very

955
00:40:29,619 --> 00:40:33,430

different conclusions so I'm kind of

956

00:40:31,599 --> 00:40:35,830

kind of following on from that and

957

00:40:33,429 --> 00:40:39,699

looking at more recent studies that have

958

00:40:35,829 --> 00:40:41,829

have taken place interestingly one of

959

00:40:39,699 --> 00:40:45,088

the parapsychologist that has produced

960

00:40:41,829 --> 00:40:49,569

some research in this area is called arc

961

00:40:45,088 --> 00:40:53,619

angel that's sort of thing doesn't

962

00:40:49,570 --> 00:40:55,539

really give much confidence really too

963

00:40:53,619 --> 00:40:58,030

skeptical reviewers but anyway I've

964

00:40:55,539 --> 00:41:02,070

looked at the research and I'm there

965

00:40:58,030 --> 00:41:05,410

typically reproducing the same mistakes

966

00:41:02,070 --> 00:41:09,420

and the methodological issues are still

967

00:41:05,409 --> 00:41:12,699

there so for example when researchers

968

00:41:09,420 --> 00:41:16,000

write in their methods section that they

969

00:41:12,699 --> 00:41:20,589

used quote for this study we

970
00:41:16,000 --> 00:41:22,090
used five gifted psychics to take part

971
00:41:20,590 --> 00:41:24,820
in this particular experiment I mean

972
00:41:22,090 --> 00:41:27,670
that kind of thing does not feel a

973
00:41:24,820 --> 00:41:29,740
skeptic a reviewer with confidence and

974
00:41:27,670 --> 00:41:33,039
there are all sorts of methodological

975
00:41:29,739 --> 00:41:34,539
issues associated with this line of

976
00:41:33,039 --> 00:41:36,489
research that's one of the things that I

977
00:41:34,539 --> 00:41:41,670
talked about the second thing that I

978
00:41:36,489 --> 00:41:44,529
talked about is the egregious nature of

979
00:41:41,670 --> 00:41:46,960
psychic mediums and I talked about the

980
00:41:44,530 --> 00:41:49,150
history of psychic mediumship etc and

981
00:41:46,960 --> 00:41:51,340
how where we are with the modern

982
00:41:49,150 --> 00:41:54,670
approach to psychic mediumship and

983
00:41:51,340 --> 00:41:56,950
nothing really seems to have changed in

984
00:41:54,670 --> 00:41:59,409
a hundred years you know we've still got

985
00:41:56,949 --> 00:42:01,899
the con artists out there and we all

986
00:41:59,409 --> 00:42:03,579
know who they are and we've still got

987
00:42:01,900 --> 00:42:05,500
the Legion of well-meaning but

988
00:42:03,579 --> 00:42:08,949
misinformed individuals who think that

989
00:42:05,500 --> 00:42:12,820
they actually have the gift so it's all

990
00:42:08,949 --> 00:42:14,980
in this anthology and to be fair to the

991
00:42:12,820 --> 00:42:18,850
publishers and the editor they've tried

992
00:42:14,980 --> 00:42:21,550
to create not just a sort of new Aug

993
00:42:18,849 --> 00:42:24,369
textbook that would be in the occult

994
00:42:21,550 --> 00:42:28,050
section of a bookshop they've actually

995
00:42:24,369 --> 00:42:32,940
very much gone for a scholarly texts and

996
00:42:28,050 --> 00:42:36,850
it is an attempt to investigate

997
00:42:32,940 --> 00:42:39,610
scientifically the nature of mediumship

998

00:42:36,849 --> 00:42:42,250
and what it all means so anyway my my

999
00:42:39,610 --> 00:42:44,200
skeptical contribution is in there look

1000
00:42:42,250 --> 00:42:47,320
out for it's called the survival

1001
00:42:44,199 --> 00:42:51,029
hypothesis mcfarland press and edited by

1002
00:42:47,320 --> 00:42:53,980
adam rock and as a little coder to this

1003
00:42:51,030 --> 00:42:57,700
as a as a result of this being published

1004
00:42:53,980 --> 00:42:59,590
i've been invited to speak at an

1005
00:42:57,699 --> 00:43:02,679
up-and-coming convention called the

1006
00:42:59,590 --> 00:43:07,870
afterlife convention and it's being held

1007
00:43:02,679 --> 00:43:13,119
next next year in melbourne and it's

1008
00:43:07,869 --> 00:43:15,969
essentially a convention is celebrating

1009
00:43:13,119 --> 00:43:17,799
the nature of mediumship celebrating the

1010
00:43:15,969 --> 00:43:20,559
fact that we can talk to the dead and

1011
00:43:17,800 --> 00:43:23,140
i'm not quite sure whether the convenes

1012
00:43:20,559 --> 00:43:24,820

a pre understand that i'm actually a

1013

00:43:23,139 --> 00:43:28,029
skeptic so it's going to be quite

1014

00:43:24,820 --> 00:43:29,440
interesting I don't really think they're

1015

00:43:28,030 --> 00:43:31,660
going to appreciate a little

1016

00:43:29,440 --> 00:43:33,940
londa pommy intimidating in no uncertain

1017

00:43:31,659 --> 00:43:36,489
terms that they're all actually deluded

1018

00:43:33,940 --> 00:43:38,530
I was wondering I don't think there's

1019

00:43:36,489 --> 00:43:40,809
actually being a public stoning of a

1020

00:43:38,530 --> 00:43:43,180
skeptic for a while but watch this space

1021

00:43:40,809 --> 00:43:47,469
because that could well happen and just

1022

00:43:43,179 --> 00:43:49,059
before I leave you two to things that

1023

00:43:47,469 --> 00:43:52,259
you might be interested in number one

1024

00:43:49,059 --> 00:43:55,108
those of you that read skeptic magazine

1025

00:43:52,260 --> 00:43:58,060
may have read my article in the last

1026

00:43:55,108 --> 00:44:01,509
edition where I'm talking about a new

1027
00:43:58,059 --> 00:44:04,690
course that I've written for Macquarie

1028
00:44:01,510 --> 00:44:07,420
University the course is called why

1029
00:44:04,690 --> 00:44:11,079
people believe weird things and it's a

1030
00:44:07,420 --> 00:44:13,358
12-week course for undergraduates it's

1031
00:44:11,079 --> 00:44:15,400
explaining why people we believe in

1032
00:44:13,358 --> 00:44:17,078
weird stuff looking at all the different

1033
00:44:15,400 --> 00:44:19,059
things that are usually bang on about

1034
00:44:17,079 --> 00:44:23,619
cognitive approaches biological

1035
00:44:19,059 --> 00:44:25,630
approaches etc etc and initially myself

1036
00:44:23,619 --> 00:44:28,539
and the director who put this together

1037
00:44:25,630 --> 00:44:30,400
mark Carter at Macquarie University we

1038
00:44:28,539 --> 00:44:34,059
expected to get about 80 students

1039
00:44:30,400 --> 00:44:37,990
enrolled in the first session that this

1040
00:44:34,059 --> 00:44:42,099
has been provoked presented but we've

1041
00:44:37,989 --> 00:44:44,439
actually just reached 450 students who

1042
00:44:42,099 --> 00:44:47,079
are now enrolled in this course so it's

1043
00:44:44,440 --> 00:44:50,679
absolutely a fabulous result and it does

1044
00:44:47,079 --> 00:44:53,410
show that skepticism is out there and

1045
00:44:50,679 --> 00:44:56,649
and it is attracting lots and lots of

1046
00:44:53,409 --> 00:45:00,338
students these are mostly education

1047
00:44:56,650 --> 00:45:02,289
students so these are future educators

1048
00:45:00,338 --> 00:45:04,929
so it were really really pleased that

1049
00:45:02,289 --> 00:45:07,929
we've got so many students enrolled and

1050
00:45:04,929 --> 00:45:12,608
at the end of the year after the course

1051
00:45:07,929 --> 00:45:16,118
has finished I'll be reporting on on the

1052
00:45:12,608 --> 00:45:17,828
students response to the course and how

1053
00:45:16,119 --> 00:45:20,800
they found it and whether their

1054
00:45:17,829 --> 00:45:24,670
particular personal views have changed

1055

00:45:20,800 --> 00:45:28,269
as a result of doing the course so I

1056
00:45:24,670 --> 00:45:31,150
will get back to you on that in a later

1057
00:45:28,269 --> 00:45:35,259
edition no doubt and just before I leave

1058
00:45:31,150 --> 00:45:37,200
it's friday the 13th and it's just at

1059
00:45:35,260 --> 00:45:40,119
the start of the world cup so it's

1060
00:45:37,199 --> 00:45:41,828
Australia's first game tonight so best

1061
00:45:40,119 --> 00:45:42,559
of luck to Australia and best of luck to

1062
00:45:41,829 --> 00:45:45,440
England

1063
00:45:42,559 --> 00:45:47,630
morrow I wonder what the chances are

1064
00:45:45,440 --> 00:45:49,760
getting England and Australia in the

1065
00:45:47,630 --> 00:45:51,200
final wouldn't that be fantastic by the

1066
00:45:49,760 --> 00:45:53,570
time you're all hearing these I'm sure

1067
00:45:51,199 --> 00:45:56,029
it's it may well all be over for both

1068
00:45:53,570 --> 00:45:58,640
Australia and England but look let's

1069
00:45:56,030 --> 00:46:01,220

keep our fingers crossed not that we

1070

00:45:58,639 --> 00:46:05,469

believe in such things okay guys let's

1071

00:46:01,219 --> 00:46:07,730

dr. Chrissy and signing off and as one

1072

00:46:05,469 --> 00:46:11,649

parapsychologist said to the other or

1073

00:46:07,730 --> 00:46:11,650

spoke to you soon bye

1074

00:46:19,519 --> 00:46:24,230

hi I'm Finn and I'm Rebecca and where

1075

00:46:22,219 --> 00:46:26,089

the skipper Collins skipper Collins is

1076

00:46:24,230 --> 00:46:27,769

an Irish podcast by the Dublin skeptics

1077

00:46:26,090 --> 00:46:29,360

society it takes a conversational

1078

00:46:27,769 --> 00:46:30,619

Reverend look at science news and

1079

00:46:29,360 --> 00:46:34,099

skeptical topics from an Irish

1080

00:46:30,619 --> 00:46:37,150

perspective you can find us at WWDC

1081

00:46:34,099 --> 00:46:37,150

Africans calm

1082

00:46:37,579 --> 00:46:41,269

pirouette stove

1083

00:46:51,000 --> 00:46:56,380

thank you for listening to the skeptic

1084
00:46:53,530 --> 00:46:58,540
zone and think it was lovely sort of

1085
00:46:56,380 --> 00:47:01,840
editorials and comments and segments we

1086
00:46:58,539 --> 00:47:03,820
had today well I really enjoyed the one

1087
00:47:01,840 --> 00:47:05,950
from cigna Kane and Joe alabaster

1088
00:47:03,820 --> 00:47:08,200
Christie Wilson and of course not to

1089
00:47:05,949 --> 00:47:09,819
forget Iran so give I wonder those

1090
00:47:08,199 --> 00:47:12,339
people who've been writing and asking me

1091
00:47:09,820 --> 00:47:15,700
about Fred the cat he's right here next

1092
00:47:12,340 --> 00:47:17,590
to me sound asleep he doesn't really

1093
00:47:15,699 --> 00:47:21,099
perform on cue Fred the cat I'm afraid

1094
00:47:17,590 --> 00:47:23,740
to say but he's doing okay he has this

1095
00:47:21,099 --> 00:47:25,420
trick of howling loudly in the morning

1096
00:47:23,739 --> 00:47:29,049
because he wants to go into the bathroom

1097
00:47:25,420 --> 00:47:31,570
to drink tap water cat owners will know

1098
00:47:29,050 --> 00:47:33,340
what I mean so for this week this is

1099
00:47:31,570 --> 00:47:37,680
Richard Saunders in a sleeping Fred the

1100
00:47:33,340 --> 00:47:37,680
cat signing off from Sydney Australia

1101
00:47:39,869 --> 00:47:47,259
you've been listening to the skeptic

1102
00:47:42,280 --> 00:47:51,040
zone visit our website at [www skeptics](http://www.skeptics)

1103
00:47:47,260 --> 00:47:53,970
on TV for comments contacts and extra

1104
00:47:51,039 --> 00:47:53,969
video reports

1105
00:47:57,028 --> 00:47:59,059
Oh