



Show 86
11.June.2010

www.skepticzone.tv

1
00:00:20,950 --> 00:00:09,589
welcome to the skeptic zone the podcast

2
00:00:25,189 --> 00:00:23,429
hello and welcome to the skeptic zone

3
00:00:27,750 --> 00:00:25,199
for the 11th of june

4
00:00:29,109 --> 00:00:27,760
episode 86 richard saunders here with

5
00:00:30,870 --> 00:00:29,119
you once again

6
00:00:33,190 --> 00:00:30,880
on this week's show we have an interview

7
00:00:35,750 --> 00:00:33,200
conducted by kylie sturgis with

8
00:00:39,750 --> 00:00:35,760
professor david blair from western

9
00:00:40,950 --> 00:00:39,760
australia all about cosmology gravity

10
00:00:42,950 --> 00:00:40,960
art

11
00:00:45,670 --> 00:00:42,960
all sorts of uh interesting things i

12
00:00:48,950 --> 00:00:45,680
hope you'll enjoy it and that's followed

13
00:00:51,190 --> 00:00:48,960

by the think tank with myself dr rachie

14

00:00:52,709 --> 00:00:51,200
and jason otherwise known as

15

00:00:54,389 --> 00:00:52,719
drunken madman

16

00:00:55,910 --> 00:00:54,399
thank you for all those people writing

17

00:00:58,150 --> 00:00:55,920
and letting me know how much you enjoy

18

00:01:00,869 --> 00:00:58,160
the show and if you really do enjoy the

19

00:01:02,310 --> 00:01:00,879
show why not tell your friends tell your

20

00:01:03,270 --> 00:01:02,320
family tell your pets and tell your

21

00:01:05,189 --> 00:01:03,280
enemies

22

00:01:07,670 --> 00:01:05,199
the more listeners we get the better it

23

00:01:09,910 --> 00:01:07,680
is for everybody i think so if you enjoy

24

00:01:12,789 --> 00:01:09,920
the show please don't be shy help us

25

00:01:16,070 --> 00:01:12,799
spread the word but for now

26

00:01:33,590 --> 00:01:16,080

grab that cup of earl grey tea hot

27

00:01:38,149 --> 00:01:36,149

i'm carly sturgis and i'm talking to

28

00:01:42,310 --> 00:01:38,159

professor david blair

29

00:01:44,469 --> 00:01:42,320

physicist and professor of physics at

30

00:01:46,550 --> 00:01:44,479

the university of western australia and

31

00:01:48,789 --> 00:01:46,560

he is the director of the australian

32

00:01:50,069 --> 00:01:48,799

international gravitational research

33

00:01:51,990 --> 00:01:50,079

center

34

00:01:54,069 --> 00:01:52,000

the gravity discovery centre is a

35

00:01:55,910 --> 00:01:54,079

premier science education centre in

36

00:01:58,149 --> 00:01:55,920

western australia for physics and

37

00:02:00,550 --> 00:01:58,159

astronomy and it is the only centre in

38

00:02:02,149 --> 00:02:00,560

australia with a focus on gravity and

39

00:02:03,590 --> 00:02:02,159

cosmology

40

00:02:05,109 --> 00:02:03,600

it is well known as a tourism

41

00:02:07,510 --> 00:02:05,119

destination

42

00:02:10,869 --> 00:02:07,520

and it is a place that manages to bring

43

00:02:11,990 --> 00:02:10,879

not only science but art and religion

44

00:02:13,910 --> 00:02:12,000

together

45

00:02:16,949 --> 00:02:13,920

due to lack of government funding the

46

00:02:18,309 --> 00:02:16,959

gravity discovery center is under threat

47

00:02:20,630 --> 00:02:18,319

so i hope that this interview with

48

00:02:21,670 --> 00:02:20,640

professor david blair helps raise some

49

00:02:27,750 --> 00:02:21,680

awareness

50

00:02:31,910 --> 00:02:30,150

i'm here with professor david blair the

51
00:02:34,229 --> 00:02:31,920
director of the australian international

52
00:02:35,430 --> 00:02:34,239
gravitational research centre

53
00:02:37,589 --> 00:02:35,440
the australian international

54
00:02:39,589 --> 00:02:37,599
gravitational observation site is at

55
00:02:41,670 --> 00:02:39,599
qinjin which is about an hour north from

56
00:02:43,670 --> 00:02:41,680
where we are right now in the physics

57
00:02:44,790 --> 00:02:43,680
building at the university of western

58
00:02:47,270 --> 00:02:44,800
australia

59
00:02:49,350 --> 00:02:47,280
the gravity discovery centre at the igo

60
00:02:51,589 --> 00:02:49,360
site is open to the public and draws

61
00:02:53,830 --> 00:02:51,599
tens of thousands of visitors and one

62
00:02:55,430 --> 00:02:53,840
fascinating aspect is the cosmology

63
00:02:57,750 --> 00:02:55,440

gallery thank you very much for joining

64

00:02:59,430 --> 00:02:57,760

me here today professor david blair i'm

65

00:03:02,070 --> 00:02:59,440

pleased to be with you how did the

66

00:03:03,509 --> 00:03:02,080

cosmology gallery come to be here in

67

00:03:05,190 --> 00:03:03,519

perth

68

00:03:08,229 --> 00:03:05,200

well

69

00:03:10,390 --> 00:03:08,239

about 10 years ago we started to plan a

70

00:03:12,070 --> 00:03:10,400

public education centre

71

00:03:14,390 --> 00:03:12,080

and we

72

00:03:17,589 --> 00:03:14,400

did lots of brainstorming and

73

00:03:18,790 --> 00:03:17,599

came up with a set of themes for this

74

00:03:21,110 --> 00:03:18,800

center

75

00:03:23,190 --> 00:03:21,120

and we wanted to make use of all the

76

00:03:24,790 --> 00:03:23,200

special attributes of our site and the

77

00:03:27,990 --> 00:03:24,800

special attributes of the site are

78

00:03:29,830 --> 00:03:28,000

fantastic clear sky a great place for a

79

00:03:31,670 --> 00:03:29,840

building a gravitational wave detector

80

00:03:33,990 --> 00:03:31,680

because it's flat

81

00:03:37,270 --> 00:03:34,000

fantastic biodiversity it's one of these

82

00:03:40,229 --> 00:03:37,280

wonderful rich places where every plant

83

00:03:42,149 --> 00:03:40,239

looks quite extraordinary and

84

00:03:43,750 --> 00:03:42,159

and very beautiful

85

00:03:47,830 --> 00:03:43,760

and

86

00:03:49,589 --> 00:03:47,840

that we called the discovery gallery we

87

00:03:51,509 --> 00:03:49,599

wanted to have a gallery that we called

88

00:03:53,509 --> 00:03:51,519

the innovation gallery

89

00:03:56,710 --> 00:03:53,519

innovation gallery was going to be about

90

00:03:59,270 --> 00:03:56,720

how western australians have made

91

00:04:01,350 --> 00:03:59,280

innovations have invented things a world

92

00:04:03,589 --> 00:04:01,360

significance because often west

93

00:04:06,149 --> 00:04:03,599

australians don't know what their people

94

00:04:08,630 --> 00:04:06,159

have done and what we wanted to do was

95

00:04:11,350 --> 00:04:08,640

to empower young people so you can do

96

00:04:13,910 --> 00:04:11,360

something of world significance but then

97

00:04:17,509 --> 00:04:13,920

also we wanted to get that sort of

98

00:04:18,390 --> 00:04:17,519

inspirational aspect of the

99

00:04:21,110 --> 00:04:18,400

um

100

00:04:22,629 --> 00:04:21,120

of why are we astronomers why do we why

101
00:04:26,629 --> 00:04:22,639
do we want to know this

102
00:04:28,550 --> 00:04:26,639
and uh and try to find some commonality

103
00:04:30,710 --> 00:04:28,560
between the

104
00:04:32,950 --> 00:04:30,720
traditional owners of our site who we

105
00:04:35,749 --> 00:04:32,960
have a very good relationship with who

106
00:04:37,430 --> 00:04:35,759
who are people who are brought up with

107
00:04:40,230 --> 00:04:37,440
the dream time

108
00:04:43,990 --> 00:04:40,240
who believe in the wobble that created

109
00:04:46,070 --> 00:04:44,000
the landscape and so how could we put

110
00:04:47,670 --> 00:04:46,080
together something that was about our

111
00:04:49,830 --> 00:04:47,680
science but also

112
00:04:52,469 --> 00:04:49,840
um that was consistent with their

113
00:04:55,270 --> 00:04:52,479

beliefs and i guess i always believed

114

00:04:58,310 --> 00:04:55,280

that that we didn't have to

115

00:05:00,790 --> 00:04:58,320

be in uh in conflict i've alwa i've

116

00:05:02,710 --> 00:05:00,800

always believed uh that

117

00:05:05,830 --> 00:05:02,720

i've always been interested in religion

118

00:05:07,909 --> 00:05:05,840

and in uh different religions and uh

119

00:05:09,350 --> 00:05:07,919

and i've always thought to myself that

120

00:05:13,350 --> 00:05:09,360

you know

121

00:05:15,749 --> 00:05:13,360

billion christians being right and the

122

00:05:17,510 --> 00:05:15,759

other six billion in the world be five

123

00:05:20,550 --> 00:05:17,520

billion people of other

124

00:05:22,469 --> 00:05:20,560

religions and beliefs being wrong or uh

125

00:05:24,550 --> 00:05:22,479

and anything of that so there had to be

126

00:05:27,590 --> 00:05:24,560

some commonality

127

00:05:30,150 --> 00:05:27,600

so we came up with the idea and in fact

128

00:05:32,550 --> 00:05:30,160

it's a slogan no really that we use for

129

00:05:34,950 --> 00:05:32,560

the cosmology gallery which is

130

00:05:38,390 --> 00:05:34,960

unity through diversity

131

00:05:41,990 --> 00:05:38,400

in a vast and awe-inspiring universe yes

132

00:05:42,950 --> 00:05:42,000

and the and with the commonality

133

00:05:48,390 --> 00:05:42,960

is

134

00:05:50,070 --> 00:05:48,400

human yearning to understand our place

135

00:05:53,830 --> 00:05:50,080

in the universe

136

00:05:56,390 --> 00:05:53,840

and so the unity is our unity of that

137

00:05:58,070 --> 00:05:56,400

yearning that all human beings yearn to

138

00:06:00,870 --> 00:05:58,080

understand their place in the universe

139

00:06:03,430 --> 00:06:00,880

they try to find the answers and they

140

00:06:06,469 --> 00:06:03,440

find the answers in different ways

141

00:06:09,110 --> 00:06:06,479

nowadays we have tools that have let us

142

00:06:11,990 --> 00:06:09,120

find with telescopes and things to find

143

00:06:15,189 --> 00:06:12,000

a much more precise answer but

144

00:06:16,150 --> 00:06:15,199

across civilizations you find a range of

145

00:06:18,950 --> 00:06:16,160

answers

146

00:06:22,230 --> 00:06:18,960

i also believe that if you put all those

147

00:06:25,029 --> 00:06:22,240

answers together and let them

148

00:06:28,070 --> 00:06:25,039

be seen together

149

00:06:31,990 --> 00:06:28,080

it allows people to to understand that

150

00:06:34,390 --> 00:06:32,000

those ideas are are stories

151

00:06:36,790 --> 00:06:34,400

which are trying to interpret

152

00:06:40,070 --> 00:06:36,800

the truth of what people observe

153

00:06:42,870 --> 00:06:40,080

and uh you don't and people will tend

154

00:06:45,670 --> 00:06:42,880

not to take them all literally

155

00:06:47,990 --> 00:06:45,680

if you see them all together so

156

00:06:51,590 --> 00:06:48,000

so we were lucky enough to get funding

157

00:06:54,550 --> 00:06:51,600

yeah and to build this amazing place

158

00:06:57,029 --> 00:06:54,560

i uh funny thing is when i was a child

159

00:06:58,870 --> 00:06:57,039

when i was about 16 i did something very

160

00:07:01,830 --> 00:06:58,880

crazy to think of it now i think it's

161

00:07:03,670 --> 00:07:01,840

really crazy i designed a church and

162

00:07:05,189 --> 00:07:03,680

designed a cathedral and i sent it to

163

00:07:07,270 --> 00:07:05,199

the archbishop

164

00:07:09,909 --> 00:07:07,280

and said hey here's a great design for a

165

00:07:13,510 --> 00:07:09,919

cathedral why don't you build it

166

00:07:18,469 --> 00:07:16,629

and so i felt incredibly privileged to

167

00:07:20,390 --> 00:07:18,479

be able to be in a position to actually

168

00:07:23,430 --> 00:07:20,400

do something that i had yearned about as

169

00:07:24,309 --> 00:07:23,440

a kid and to create some a place that

170

00:07:27,029 --> 00:07:24,319

could

171

00:07:29,110 --> 00:07:27,039

uh be the venue for

172

00:07:31,189 --> 00:07:29,120

getting that sort of inspirational

173

00:07:33,909 --> 00:07:31,199

thinking going ahead and then we were

174

00:07:35,830 --> 00:07:33,919

got funding from the uh lotteries

175

00:07:38,390 --> 00:07:35,840

lottery west to

176

00:07:39,990 --> 00:07:38,400

hire artists to

177

00:07:41,990 --> 00:07:40,000

from different cultural backgrounds and

178

00:07:43,830 --> 00:07:42,000

we had our workshop sessions with the

179

00:07:46,870 --> 00:07:43,840

artists and we talked about the

180

00:07:48,469 --> 00:07:46,880

scientific ideas and about the their own

181

00:07:50,710 --> 00:07:48,479

ideas and the fact that all their

182

00:07:52,150 --> 00:07:50,720

artworks were going to be put together

183

00:07:53,990 --> 00:07:52,160

and we were trying to find some

184

00:07:56,150 --> 00:07:54,000

commonality

185

00:07:57,510 --> 00:07:56,160

while still staying true to their

186

00:07:59,510 --> 00:07:57,520

traditions

187

00:08:02,469 --> 00:07:59,520

so the result was that we've come we've

188

00:08:06,629 --> 00:08:02,479

got this beautiful gallery

189

00:08:12,070 --> 00:08:09,350

dream time images there's

190

00:08:15,189 --> 00:08:12,080

a wonderful hindu image there's a

191

00:08:17,189 --> 00:08:15,199

wonderful buddhist mandala

192

00:08:19,110 --> 00:08:17,199

all sorts of different

193

00:08:23,029 --> 00:08:19,120

images that reflect the different

194

00:08:25,110 --> 00:08:23,039

cultural traditions plus the scientific

195

00:08:27,189 --> 00:08:25,120

history of the universe as we understand

196

00:08:29,350 --> 00:08:27,199

it all put together and it's separated

197

00:08:31,110 --> 00:08:29,360

by the floors i noticed that downstairs

198

00:08:34,149 --> 00:08:31,120

has penrose tiling which i believe you

199

00:08:35,350 --> 00:08:34,159

even had the man himself come to yes yes

200

00:08:39,350 --> 00:08:35,360

yeah yeah

201
00:08:41,029 --> 00:08:39,360
the place we haven't been trying to be

202
00:08:43,750 --> 00:08:41,039
too uh

203
00:08:46,550 --> 00:08:43,760
too fixed in that yeah and then the

204
00:08:49,430 --> 00:08:46,560
gallery has a huge dome yes the dome

205
00:08:52,150 --> 00:08:49,440
itself is the largest bucky ball in the

206
00:08:55,750 --> 00:08:52,160
world icosahedron yeah and the

207
00:08:59,110 --> 00:08:55,760
nice thing about that that shape is is

208
00:09:01,670 --> 00:08:59,120
history uh first of all pythagoras

209
00:09:04,550 --> 00:09:01,680
uh described that shape

210
00:09:07,350 --> 00:09:04,560
when he would add when he believed that

211
00:09:09,990 --> 00:09:07,360
the uh secret of the universe

212
00:09:11,110 --> 00:09:10,000
was in geometry

213
00:09:13,590 --> 00:09:11,120

and then

214

00:09:16,870 --> 00:09:13,600

leonardo drew it

215

00:09:19,430 --> 00:09:16,880

and then bar minister fuller patented it

216

00:09:21,910 --> 00:09:19,440

for use in soccer balls yeah so this is

217

00:09:25,670 --> 00:09:21,920

you know millennium after millennium but

218

00:09:28,630 --> 00:09:25,680

then 1985 it was discovered in nature so

219

00:09:31,269 --> 00:09:28,640

in the sense pythagoras was right there

220

00:09:33,350 --> 00:09:31,279

it was in nature actually existing and

221

00:09:35,269 --> 00:09:33,360

that's the these little fullerene

222

00:09:37,509 --> 00:09:35,279

molecules made out of carbon called

223

00:09:39,910 --> 00:09:37,519

carbon 60. so

224

00:09:42,070 --> 00:09:39,920

and that has a beautiful similar five

225

00:09:42,949 --> 00:09:42,080

and six fold symmetry

226

00:09:47,910 --> 00:09:42,959

and

227

00:09:50,870 --> 00:09:47,920

underneath the penrose tiling which is

228

00:09:53,110 --> 00:09:50,880

non-periodic but still has a five-fold

229

00:09:55,269 --> 00:09:53,120

symmetry and it represents the sort of

230

00:09:57,430 --> 00:09:55,279

pinnacle of mathematics today

231

00:09:58,870 --> 00:09:57,440

so we've created that connection and it

232

00:10:01,670 --> 00:09:58,880

even includes

233

00:10:04,870 --> 00:10:01,680

the soccer ball and popular culture

234

00:10:06,550 --> 00:10:04,880

all within the one amazing gallery

235

00:10:08,710 --> 00:10:06,560

now if people want to find out more

236

00:10:11,190 --> 00:10:08,720

about the site and the activities there

237

00:10:12,790 --> 00:10:11,200

where do they go we have a

238

00:10:14,310 --> 00:10:12,800

there's a really good website but

239

00:10:17,430 --> 00:10:14,320

there's also

240

00:10:21,190 --> 00:10:17,440

a nice web page which is called

241

00:10:24,949 --> 00:10:22,790

that is the web page for the

242

00:10:25,910 --> 00:10:24,959

gravitational wave observatory

243

00:10:27,750 --> 00:10:25,920

because

244

00:10:30,310 --> 00:10:27,760

really now what we're trying to do is

245

00:10:33,269 --> 00:10:30,320

consolidate our education programs we're

246

00:10:34,949 --> 00:10:33,279

just starting a fantastic phd project

247

00:10:39,590 --> 00:10:34,959

there where we're going to have four

248

00:10:41,829 --> 00:10:39,600

phds who are working on evaluating the

249

00:10:43,269 --> 00:10:41,839

different ways that we are teaching

250

00:10:45,350 --> 00:10:43,279

and one of the ways we're teaching is

251
00:10:46,630 --> 00:10:45,360
having kids involved in using a big

252
00:10:49,269 --> 00:10:46,640
telescope

253
00:10:51,190 --> 00:10:49,279
to detect gamma-ray bursts which we

254
00:10:53,110 --> 00:10:51,200
think are sources of gravity waves which

255
00:10:54,550 --> 00:10:53,120
we think are black holes being formed in

256
00:10:56,150 --> 00:10:54,560
the early universe

257
00:10:59,110 --> 00:10:56,160
and we let and

258
00:11:00,470 --> 00:10:59,120
we and by linking up with satellites we

259
00:11:05,590 --> 00:11:00,480
can

260
00:11:06,870 --> 00:11:05,600
and see these gamma-ray bursts which are

261
00:11:09,509 --> 00:11:06,880
occurring

262
00:11:11,829 --> 00:11:09,519
when the universe was about 1 billion

263
00:11:13,990 --> 00:11:11,839

years old in other words

264

00:11:16,310 --> 00:11:14,000

more than 10 billion years ago more than

265

00:11:18,069 --> 00:11:16,320

twice the age of the earth they go so

266

00:11:20,150 --> 00:11:18,079

one of the ways we're trying to excite

267

00:11:21,269 --> 00:11:20,160

kids is to

268

00:11:23,269 --> 00:11:21,279

let them

269

00:11:25,590 --> 00:11:23,279

realize that they're actually able to

270

00:11:28,550 --> 00:11:25,600

see life that was emitted

271

00:11:30,790 --> 00:11:28,560

twice the age of the earth a go

272

00:11:34,310 --> 00:11:30,800

and seeing into the past and kind of

273

00:11:36,230 --> 00:11:34,320

getting those amazing ideas of astronomy

274

00:11:38,069 --> 00:11:36,240

what has been the overall response in

275

00:11:39,910 --> 00:11:38,079

regards to this because it seems to be

276

00:11:41,910 --> 00:11:39,920

quite unique and even quite challenging

277

00:11:43,910 --> 00:11:41,920

for some people i guess to have both the

278

00:11:46,550 --> 00:11:43,920

science and religious world views

279

00:11:49,590 --> 00:11:46,560

combined in one place yeah well i've

280

00:11:53,990 --> 00:11:49,600

actually been quite surprised that

281

00:11:56,870 --> 00:11:54,000

nobody has complained since we built it

282

00:11:59,509 --> 00:11:56,880

but before we built it uh when i was

283

00:12:01,509 --> 00:11:59,519

talking to a physicist who comes from

284

00:12:05,030 --> 00:12:01,519

southern united states

285

00:12:07,829 --> 00:12:05,040

he said this is a terrible mistake don't

286

00:12:10,150 --> 00:12:07,839

even think about building this he said

287

00:12:12,790 --> 00:12:10,160

you'll have creationists coming in and

288

00:12:16,069 --> 00:12:12,800

desecrating it and

289

00:12:18,629 --> 00:12:16,079

you'll create religious disharmony

290

00:12:20,150 --> 00:12:18,639

there's been no sign whatsoever of that

291

00:12:23,190 --> 00:12:20,160

here perhaps that would happen in

292

00:12:24,790 --> 00:12:23,200

southern usa but it's been great here

293

00:12:27,269 --> 00:12:24,800

that there's been

294

00:12:29,350 --> 00:12:27,279

no complaints whatsoever about putting

295

00:12:30,550 --> 00:12:29,360

these ideas together

296

00:12:31,910 --> 00:12:30,560

now what are some of the other future

297

00:12:33,350 --> 00:12:31,920

plans for the site what can we look

298

00:12:35,110 --> 00:12:33,360

forward to if we

299

00:12:36,629 --> 00:12:35,120

go and see it again

300

00:12:38,389 --> 00:12:36,639

the the other

301
00:12:40,710 --> 00:12:38,399
piece that's there was the bit that was

302
00:12:42,150 --> 00:12:40,720
to be the wow factor for the

303
00:12:44,150 --> 00:12:42,160
teenage kids

304
00:12:47,110 --> 00:12:44,160
and that's the leaning tower of jinjin

305
00:12:50,069 --> 00:12:47,120
yes i've went up at 222 steps it was

306
00:12:52,470 --> 00:12:50,079
quite an experience yeah and uh and it's

307
00:12:53,350 --> 00:12:52,480
wonderful to look at classes of school

308
00:12:55,750 --> 00:12:53,360
kids

309
00:12:58,629 --> 00:12:55,760
up there having carried balloons full of

310
00:13:02,069 --> 00:12:58,639
water at the top and then dropping these

311
00:13:04,069 --> 00:13:02,079
balloons repeating galileo's experiments

312
00:13:06,710 --> 00:13:04,079
i think the idea behind that is also

313
00:13:08,949 --> 00:13:06,720

quite fun which is that we are

314

00:13:11,110 --> 00:13:08,959

because we are trying to promote a sort

315

00:13:13,030 --> 00:13:11,120

of skeptical scientific view of the

316

00:13:15,110 --> 00:13:13,040

world and in this case we've turned the

317

00:13:18,310 --> 00:13:15,120

tables on galileo

318

00:13:21,110 --> 00:13:18,320

because galileo said in his writings

319

00:13:23,990 --> 00:13:21,120

if you were to drop two things from the

320

00:13:25,269 --> 00:13:24,000

leaning tower of pisa and if they were

321

00:13:27,910 --> 00:13:25,279

to land

322

00:13:31,190 --> 00:13:27,920

two fingers widths apart

323

00:13:32,389 --> 00:13:31,200

in in their four at the point of impact

324

00:13:34,710 --> 00:13:32,399

would you

325

00:13:37,110 --> 00:13:34,720

say that the aristotelians

326

00:13:39,750 --> 00:13:37,120

were correct because the aristotelians

327

00:13:41,750 --> 00:13:39,760

the followers of aristotle believed that

328

00:13:43,990 --> 00:13:41,760

things fell at a speed proportional to

329

00:13:46,069 --> 00:13:44,000

their mass

330

00:13:49,269 --> 00:13:46,079

well you don't actually need

331

00:13:50,470 --> 00:13:49,279

a leaning tower to convince yourself

332

00:13:53,829 --> 00:13:50,480

that

333

00:13:54,790 --> 00:13:53,839

um you know a one kilo rock

334

00:13:57,030 --> 00:13:54,800

uh

335

00:13:58,550 --> 00:13:57,040

doesn't fall twice as fast as a half

336

00:14:00,550 --> 00:13:58,560

kilo rock you just have to drop them

337

00:14:03,509 --> 00:14:00,560

both on your toes and they'll both hurt

338

00:14:05,750 --> 00:14:03,519

at the same time but at the same time

339

00:14:07,269 --> 00:14:05,760

that was galileo's

340

00:14:08,389 --> 00:14:07,279

argument

341

00:14:10,550 --> 00:14:08,399

and

342

00:14:12,230 --> 00:14:10,560

we asked the kids to go up there with

343

00:14:13,910 --> 00:14:12,240

identical balloons

344

00:14:15,829 --> 00:14:13,920

and see if they can make them land

345

00:14:18,069 --> 00:14:15,839

within two fingers widths of each other

346

00:14:19,750 --> 00:14:18,079

yeah they can't do it

347

00:14:24,069 --> 00:14:19,760

it can't be done

348

00:14:24,870 --> 00:14:24,079

human reflexes

349

00:14:26,629 --> 00:14:24,880

are

350

00:14:28,550 --> 00:14:26,639

slightly asymmetric because we've got

351

00:14:31,030 --> 00:14:28,560

asymmetric brains

352

00:14:33,030 --> 00:14:31,040

as a result he can't let go of two

353

00:14:35,750 --> 00:14:33,040

balloons simultaneously to within a

354

00:14:38,470 --> 00:14:35,760

millisecond which is what is required to

355

00:14:39,670 --> 00:14:38,480

achieve this two fingers widths

356

00:14:41,509 --> 00:14:39,680

and so

357

00:14:44,389 --> 00:14:41,519

the kids go away

358

00:14:46,389 --> 00:14:44,399

saying well aris of galileo was not

359

00:14:48,710 --> 00:14:46,399

telling the truth

360

00:14:50,389 --> 00:14:48,720

in the sense that he didn't actually do

361

00:14:53,269 --> 00:14:50,399

the experiment but

362

00:14:54,949 --> 00:14:53,279

but he didn't lie because he

363

00:14:56,389 --> 00:14:54,959

never claimed to have done the

364

00:14:58,710 --> 00:14:56,399

experiment

365

00:15:01,110 --> 00:14:58,720

in his writings it's actually written as

366

00:15:03,670 --> 00:15:01,120

a thought experiment so we can

367

00:15:04,629 --> 00:15:03,680

lord him as the first person who

368

00:15:05,509 --> 00:15:04,639

uh

369

00:15:07,750 --> 00:15:05,519

who

370

00:15:09,829 --> 00:15:07,760

at least published a thought experiment

371

00:15:11,910 --> 00:15:09,839

and made deductions on the basis of a

372

00:15:13,350 --> 00:15:11,920

thought experiment

373

00:15:15,590 --> 00:15:13,360

but

374

00:15:18,550 --> 00:15:15,600

still the kids turned the tables on

375

00:15:20,470 --> 00:15:18,560

galileo and are able to say he could not

376

00:15:22,150 --> 00:15:20,480

have done that experiment

377

00:15:24,310 --> 00:15:22,160

now if people want to find out more

378

00:15:26,790 --> 00:15:24,320

about the site and the activities there

379

00:15:29,189 --> 00:15:26,800

where do they go we have a

380

00:15:31,110 --> 00:15:29,199

there's a really good website which is

381

00:15:33,030 --> 00:15:31,120

gravity

382

00:15:35,829 --> 00:15:33,040

center

383

00:15:37,509 --> 00:15:35,839

not

384

00:15:39,030 --> 00:15:37,519

try to give you a web address but

385

00:15:42,150 --> 00:15:39,040

there's also

386

00:15:45,910 --> 00:15:42,160

a nice web page which is called

387

00:15:49,670 --> 00:15:47,509

that is the web page for the

388

00:15:50,629 --> 00:15:49,680

gravitational wave observatory

389

00:15:52,470 --> 00:15:50,639

because

390

00:15:55,030 --> 00:15:52,480

really now what we're trying to do is

391

00:15:57,990 --> 00:15:55,040

consolidate our education programs we're

392

00:15:59,670 --> 00:15:58,000

just starting a fantastic phd project

393

00:16:04,310 --> 00:15:59,680

there where we're going to have four

394

00:16:06,550 --> 00:16:04,320

phds who are working on evaluating the

395

00:16:07,990 --> 00:16:06,560

different ways that we are teaching

396

00:16:10,069 --> 00:16:08,000

and one of the ways we're teaching is

397

00:16:13,509 --> 00:16:10,079

having kids involved in using a big

398

00:16:15,350 --> 00:16:13,519

telescope to detect gamma-ray bursts

399

00:16:17,189 --> 00:16:15,360

which we think are sources of gravity

400

00:16:19,269 --> 00:16:17,199

waves which we think are black holes

401
00:16:20,870 --> 00:16:19,279
being formed in the early universe

402
00:16:23,829 --> 00:16:20,880
and we're let and

403
00:16:25,189 --> 00:16:23,839
we and by linking up with satellites we

404
00:16:30,310 --> 00:16:25,199
can

405
00:16:31,590 --> 00:16:30,320
and see these gamma-ray bursts which are

406
00:16:34,150 --> 00:16:31,600
occurring

407
00:16:37,350 --> 00:16:34,160
when the universe was about 1 billion

408
00:16:39,269 --> 00:16:37,360
years old in other words of more than 10

409
00:16:41,350 --> 00:16:39,279
billion years ago more than twice the

410
00:16:44,870 --> 00:16:41,360
age of the earth they got so one of the

411
00:16:45,990 --> 00:16:44,880
ways we're trying to excite kids is to

412
00:16:47,990 --> 00:16:46,000
let them

413
00:16:51,269 --> 00:16:48,000

realize that they're actually able to

414

00:16:53,269 --> 00:16:51,279

see life that was emitted twice the age

415

00:16:55,509 --> 00:16:53,279

of the earth ago

416

00:16:58,870 --> 00:16:55,519

and seeing into the past and kind of

417

00:17:02,550 --> 00:16:58,880

getting those amazing ideas of astronomy

418

00:17:03,990 --> 00:17:02,560

uh as part of their actual experience

419

00:17:06,789 --> 00:17:04,000

so it's all happening here right here in

420

00:17:10,069 --> 00:17:08,309

to find out more about the gravity

421

00:17:14,789 --> 00:17:10,079

discovery center head to

422

00:17:20,390 --> 00:17:17,429

if you head to my site at podblack.com

423

00:17:31,990 --> 00:17:20,400

you'll even find a video of me going up

424

00:17:36,070 --> 00:17:33,990

astronomy cast takes a fact-based

425

00:17:37,750 --> 00:17:36,080

journey through the cosmos as it offers

426

00:17:40,390 --> 00:17:37,760

listeners weekly discussions on

427

00:17:41,830 --> 00:17:40,400

astronomical topics ranging from planets

428

00:17:44,230 --> 00:17:41,840

to cosmology

429

00:17:46,230 --> 00:17:44,240

hosted by fraser kane of universe today

430

00:17:48,630 --> 00:17:46,240

and myself dr pamela gay of southern

431

00:17:50,390 --> 00:17:48,640

illinois university edwardsville this

432

00:17:52,150 --> 00:17:50,400

show brings the questions of an avid

433

00:17:54,870 --> 00:17:52,160

astronomy lover directly to an

434

00:17:56,710 --> 00:17:54,880

astronomer together fraser and i explore

435

00:17:58,470 --> 00:17:56,720

what is known and being discovered about

436

00:18:00,390 --> 00:17:58,480

the universe around us

437

00:18:02,070 --> 00:18:00,400

join us each week as we take a fact

438

00:18:11,029 --> 00:18:02,080

space journey through the cosmos at

439

00:18:26,630 --> 00:18:14,070

join us now for drinking skeptically in

440

00:18:26,640 --> 00:18:35,270

on the banjo

441

00:18:38,950 --> 00:18:37,430

and we were just uh hi george rob we

442

00:18:40,870 --> 00:18:38,960

were just watching and listening to your

443

00:18:45,350 --> 00:18:40,880

fantastic video far one of the best

444

00:18:47,830 --> 00:18:45,360

videos uh on the internet by far by far

445

00:18:50,549 --> 00:18:47,840

by far jason hi jason good evening

446

00:18:53,669 --> 00:18:50,559

richard good evening and hello dr agee

447

00:18:55,510 --> 00:18:53,679

hello richard hi jason hello now

448

00:18:57,510 --> 00:18:55,520

normally we're doing the um the think

449

00:18:59,029 --> 00:18:57,520

tank from our favorite club down the

450

00:19:00,070 --> 00:18:59,039

street but our favorite club down the

451

00:19:01,510 --> 00:19:00,080

street is

452

00:19:03,830 --> 00:19:01,520

well not really let us down but they

453

00:19:06,150 --> 00:19:03,840

were rather packed tonight dr h yeah

454

00:19:08,630 --> 00:19:06,160

they had some show on called

455

00:19:10,870 --> 00:19:08,640

el divo el daigo

456

00:19:12,390 --> 00:19:10,880

something like that yeah it was the one

457

00:19:13,430 --> 00:19:12,400

that's going to work as in the sort of

458

00:19:15,110 --> 00:19:13,440

the uh

459

00:19:17,190 --> 00:19:15,120

pejorative term for a spanish person

460

00:19:19,190 --> 00:19:17,200

yeah well it's um

461

00:19:21,110 --> 00:19:19,200

there's a comedy group here who do send

462

00:19:22,870 --> 00:19:21,120

up with their own heritage their greek

463

00:19:25,190 --> 00:19:22,880

heritage they call them wogs out of work

464

00:19:27,430 --> 00:19:25,200

or the [h__h] boy or something like that

465

00:19:29,990 --> 00:19:27,440

so lots of people at the club

466

00:19:32,150 --> 00:19:30,000

we searched high and low but decided to

467

00:19:33,909 --> 00:19:32,160

finally end up here in dr he's front

468

00:19:36,830 --> 00:19:33,919

room

469

00:19:39,750 --> 00:19:36,840

never mind cheers

470

00:19:41,510 --> 00:19:39,760

cheers cheese thank you

471

00:19:42,950 --> 00:19:41,520

one of those is a bit plasticky it's a

472

00:19:44,789 --> 00:19:42,960

bit plastic

473

00:19:46,549 --> 00:19:44,799

but we're um

474

00:19:49,909 --> 00:19:46,559

never fear we're sitting here having a

475

00:19:52,789 --> 00:19:49,919

good time and waiting for our pizza

476

00:19:55,830 --> 00:19:52,799

mexican and supreme crust delicious

477

00:19:58,230 --> 00:19:55,840

pizza delicious crusty pizza

478

00:20:00,470 --> 00:19:58,240

it's um it's great to be here in

479

00:20:02,870 --> 00:20:00,480

rachel's front room think tank which

480

00:20:05,270 --> 00:20:02,880

we've done before rachel

481

00:20:07,510 --> 00:20:05,280

we've done it once before richard but um

482

00:20:09,909 --> 00:20:07,520

yeah some time ago actually was when we

483

00:20:12,230 --> 00:20:09,919

had kylie on skype on skype yeah and we

484

00:20:14,630 --> 00:20:12,240

did a think tank with kylie via skype

485

00:20:17,669 --> 00:20:14,640

from perth yeah very technological of

486

00:20:19,669 --> 00:20:17,679

you was very technological

487

00:20:22,549 --> 00:20:19,679

now tonight we're going to be covering

488

00:20:24,870 --> 00:20:22,559

such um issues as homeopathy we're going

489

00:20:26,870 --> 00:20:24,880

to be talking to jason about um

490

00:20:28,950 --> 00:20:26,880

a tam australia event we're going to be

491

00:20:30,870 --> 00:20:28,960

listening to the planes flying overhead

492

00:20:32,630 --> 00:20:30,880

which i can sort of just hear one now

493

00:20:35,350 --> 00:20:32,640

that's them landing actually orlando

494

00:20:40,070 --> 00:20:37,510

you know too much

495

00:20:41,669 --> 00:20:40,080

i do i'm going to start off by

496

00:20:43,909 --> 00:20:41,679

covering a story which was brought to my

497

00:20:47,029 --> 00:20:43,919

attention by one of our listeners uh

498

00:20:49,350 --> 00:20:47,039

thanks to glenn baker glenn baker

499

00:20:52,230 --> 00:20:49,360

who actually works at the a in uh

500

00:20:54,549 --> 00:20:52,240

stadium here in sydney and this story is

501
00:20:56,950 --> 00:20:54,559
to do with the our good old friends at

502
00:20:59,270 --> 00:20:56,960
the power balance a

503
00:21:01,669 --> 00:20:59,280
magical bracelet that gives you magical

504
00:21:02,470 --> 00:21:01,679
energy and all the rest of it

505
00:21:04,950 --> 00:21:02,480
and

506
00:21:07,270 --> 00:21:04,960
glenn brought my attention to the daily

507
00:21:09,830 --> 00:21:07,280
telegraph newspaper

508
00:21:13,029 --> 00:21:09,840
dated the 10th of june

509
00:21:15,270 --> 00:21:13,039
on the whole back page a huge section of

510
00:21:17,669 --> 00:21:15,280
the back page i should say most of it

511
00:21:19,750 --> 00:21:17,679
is dedicated to a story

512
00:21:22,070 --> 00:21:19,760
when which is normally the sports

513
00:21:25,270 --> 00:21:22,080

section so it's a sports story when all

514

00:21:26,870 --> 00:21:25,280

else fails the blues turn to a

515

00:21:29,110 --> 00:21:26,880

band aid

516

00:21:31,110 --> 00:21:29,120

big picture of the new south wales rugby

517

00:21:32,230 --> 00:21:31,120

league team who aren't doing too well at

518

00:21:34,310 --> 00:21:32,240

the moment

519

00:21:37,590 --> 00:21:34,320

and about half of them are wearing this

520

00:21:38,630 --> 00:21:37,600

power balance um

521

00:21:40,070 --> 00:21:38,640

device

522

00:21:42,149 --> 00:21:40,080

i noticed they've got little visual

523

00:21:44,470 --> 00:21:42,159

call-outs on the wrists yeah you can see

524

00:21:46,470 --> 00:21:44,480

how many of them are wearing it

525

00:21:48,470 --> 00:21:46,480

um

526
00:21:49,510 --> 00:21:48,480
now they as i said they're not doing too

527
00:21:51,669 --> 00:21:49,520
well

528
00:21:53,750 --> 00:21:51,679
and the

529
00:21:57,430 --> 00:21:53,760
report says um

530
00:21:58,950 --> 00:21:57,440
call them our last desperate play

531
00:22:00,789 --> 00:21:58,960
thousand four hundred dollar mix of

532
00:22:03,510 --> 00:22:00,799
science silicon

533
00:22:05,270 --> 00:22:03,520
what what's up how many how many dollars

534
00:22:07,190 --> 00:22:05,280
two thousand four hundred it says here

535
00:22:08,870 --> 00:22:07,200
that must be the value of the box they

536
00:22:11,510 --> 00:22:08,880
sent them

537
00:22:13,669 --> 00:22:11,520
uh silicon uh the one around the wrist

538
00:22:16,310 --> 00:22:13,679

of every new south wales origin player

539

00:22:18,230 --> 00:22:16,320

now the origin that means that every

540

00:22:20,549 --> 00:22:18,240

year there are a series of games between

541

00:22:22,390 --> 00:22:20,559

this state new south wales and

542

00:22:24,630 --> 00:22:22,400

queensland the state to our north in

543

00:22:26,470 --> 00:22:24,640

rugby league and the new south wales

544

00:22:29,669 --> 00:22:26,480

team aren't doing very well

545

00:22:32,870 --> 00:22:29,679

so they've been sent a box of power

546

00:22:33,990 --> 00:22:32,880

balance bracelets to wear

547

00:22:34,789 --> 00:22:34,000

yeah

548

00:22:38,870 --> 00:22:34,799

and

549

00:22:40,789 --> 00:22:38,880

as a marketing ploy it's it's worked

550

00:22:43,669 --> 00:22:40,799

better than your wildest dreams because

551
00:22:45,190 --> 00:22:43,679
it's not only the whole back page

552
00:22:46,470 --> 00:22:45,200
with photographs of the team wearing

553
00:22:48,230 --> 00:22:46,480
this

554
00:22:52,149 --> 00:22:48,240
power balance

555
00:22:54,310 --> 00:22:52,159
but half a page in in the sports section

556
00:22:56,870 --> 00:22:54,320
it's also another story about the same

557
00:22:59,510 --> 00:22:56,880
thing blues band of brothers

558
00:23:01,510 --> 00:22:59,520
they've been likened to superman's cape

559
00:23:03,110 --> 00:23:01,520
only the new south wales origin players

560
00:23:05,350 --> 00:23:03,120
won't need to go running into a phone

561
00:23:07,110 --> 00:23:05,360
box before putting them on the daily

562
00:23:09,909 --> 00:23:07,120
telegraph can reveal that the blues

563
00:23:12,470 --> 00:23:09,919

officials have ordered in 40 power

564

00:23:15,110 --> 00:23:12,480

balance wristbands as part of a bizarre

565

00:23:16,549 --> 00:23:15,120

attempt to stop queensland winning a

566

00:23:20,390 --> 00:23:16,559

record fifth

567

00:23:22,870 --> 00:23:20,400

uh consecutive state of origin series

568

00:23:24,230 --> 00:23:22,880

so they're like superman's cake

569

00:23:25,750 --> 00:23:24,240

because we know from the incredibles

570

00:23:27,190 --> 00:23:25,760

that the cape is a major health and

571

00:23:29,110 --> 00:23:27,200

safety problem

572

00:23:31,190 --> 00:23:29,120

and it can get you sucked into aeroplane

573

00:23:32,950 --> 00:23:31,200

engines which i think figuratively new

574

00:23:35,029 --> 00:23:32,960

south wales are gonna get

575

00:23:36,870 --> 00:23:35,039

but isn't it also richard if they

576

00:23:39,350 --> 00:23:36,880

actually worked isn't this considered

577

00:23:41,909 --> 00:23:39,360

performance enhancing stuff therefore

578

00:23:44,230 --> 00:23:41,919

it's illegal this is a really good point

579

00:23:46,549 --> 00:23:44,240

now if these things worked as claim in

580

00:23:48,470 --> 00:23:46,559

otherwise in other words they

581

00:23:50,630 --> 00:23:48,480

dramatically improve your balance your

582

00:23:52,950 --> 00:23:50,640

strength your stamina all the things

583

00:23:56,390 --> 00:23:52,960

they claim about it then yes it's

584

00:23:58,310 --> 00:23:56,400

cheating it's it's blatant cheating if

585

00:23:59,750 --> 00:23:58,320

they worked as claimed

586

00:24:01,350 --> 00:23:59,760

and that's the big if well the funny

587

00:24:04,149 --> 00:24:01,360

thing is i had a chance to look at the

588

00:24:05,909 --> 00:24:04,159

comments on this story online

589

00:24:07,909 --> 00:24:05,919

and most of the comments were derogatory

590

00:24:09,110 --> 00:24:07,919

by the way most of them said well if

591

00:24:11,029 --> 00:24:09,120

you're that hopeless that you need a

592

00:24:12,789 --> 00:24:11,039

little plastic rubber band then you've

593

00:24:14,630 --> 00:24:12,799

got no chance

594

00:24:16,710 --> 00:24:14,640

and then the other comments were well

595

00:24:18,549 --> 00:24:16,720

this is tantamount to cheating if you're

596

00:24:20,630 --> 00:24:18,559

going to use these things to

597

00:24:22,950 --> 00:24:20,640

enhance your performance

598

00:24:24,549 --> 00:24:22,960

that's up nearly a very good point and

599

00:24:26,230 --> 00:24:24,559

the other day i was sitting at home and

600

00:24:27,990 --> 00:24:26,240

a reporter from the sydney morning

601
00:24:29,430 --> 00:24:28,000
herald contacted me

602
00:24:31,190 --> 00:24:29,440
they're doing a story about this power

603
00:24:33,110 --> 00:24:31,200
balance

604
00:24:34,789 --> 00:24:33,120
and the reporter i must say i just can't

605
00:24:36,549 --> 00:24:34,799
recall her name but she sounded very

606
00:24:39,430 --> 00:24:36,559
skeptical she said but what about the

607
00:24:40,870 --> 00:24:39,440
claims that it it affects your body's

608
00:24:43,269 --> 00:24:40,880
biofilm and then she stopped and she

609
00:24:46,549 --> 00:24:43,279
said you know i did biology at school

610
00:24:48,870 --> 00:24:46,559
that sounds ridiculous

611
00:24:51,190 --> 00:24:48,880
i mean you mentioned before that this is

612
00:24:52,870 --> 00:24:51,200
a very very good marketing exercise and

613
00:24:54,870 --> 00:24:52,880

it's brilliant i mean this is how power

614

00:24:57,269 --> 00:24:54,880

balance targets what they do

615

00:24:58,830 --> 00:24:57,279

they give it to elite athletes they give

616

00:25:01,350 --> 00:24:58,840

it to basketballers they give it to

617

00:25:02,789 --> 00:25:01,360

swimmers similar to what life wave do

618

00:25:04,630 --> 00:25:02,799

those life wave patches that i've

619

00:25:06,549 --> 00:25:04,640

blogged about before

620

00:25:08,390 --> 00:25:06,559

and i've talked about on the zone

621

00:25:10,470 --> 00:25:08,400

months and months ago

622

00:25:12,710 --> 00:25:10,480

and so once they have this legitimacy

623

00:25:14,710 --> 00:25:12,720

led to them by elite sports players

624

00:25:16,630 --> 00:25:14,720

people think well they must work so

625

00:25:17,750 --> 00:25:16,640

everyone's going to see for the next

626
00:25:19,830 --> 00:25:17,760
month

627
00:25:21,029 --> 00:25:19,840
the new south wales blues team playing

628
00:25:22,470 --> 00:25:21,039
with these things on their wrist and

629
00:25:24,470 --> 00:25:22,480
think well i want one of those because

630
00:25:26,950 --> 00:25:24,480
they must work well the thing is of

631
00:25:29,830 --> 00:25:26,960
course if if the blues happened to win

632
00:25:31,590 --> 00:25:29,840
the next game which i think is next week

633
00:25:33,269 --> 00:25:31,600
um you can bet there'll be people

634
00:25:35,510 --> 00:25:33,279
crowing saying you see

635
00:25:38,470 --> 00:25:35,520
it it works there's strange noises

636
00:25:40,390 --> 00:25:38,480
coming from out your window doctor

637
00:25:42,470 --> 00:25:40,400
i don't know what it is

638
00:25:44,310 --> 00:25:42,480

children it's past your bedtime do you

639

00:25:46,310 --> 00:25:44,320

get like fires and crazy things

640

00:25:48,630 --> 00:25:46,320

happening in your street yes people that

641

00:25:51,750 --> 00:25:48,640

know me on twitter would be aware that i

642

00:25:54,950 --> 00:25:51,760

have had a few uh strange occurrences

643

00:25:57,110 --> 00:25:54,960

here like car cars catching fire outside

644

00:25:58,710 --> 00:25:57,120

your door cars catching on fire um

645

00:26:00,789 --> 00:25:58,720

ninjas have been in the news recently

646

00:26:03,830 --> 00:26:00,799

haven't they yeah ninjas

647

00:26:06,390 --> 00:26:03,840

i had ninjas i'm quite serious brilliant

648

00:26:07,830 --> 00:26:06,400

um if you look out the window and

649

00:26:10,310 --> 00:26:07,840

obviously listeners can't see this but

650

00:26:12,310 --> 00:26:10,320

there's a large house with a turret

651
00:26:14,390 --> 00:26:12,320
right opposite here i was sitting in

652
00:26:17,190 --> 00:26:14,400
this room one night and i happened to

653
00:26:19,830 --> 00:26:17,200
glance across and saw five ninjas on the

654
00:26:22,230 --> 00:26:19,840
roof of the house opposite me

655
00:26:24,230 --> 00:26:22,240
if you the level of my flat which is

656
00:26:26,870 --> 00:26:24,240
level one is level with the roof of this

657
00:26:28,149 --> 00:26:26,880
particular house so if i had my lights

658
00:26:30,870 --> 00:26:28,159
on which i did they could have seen

659
00:26:32,630 --> 00:26:30,880
straight into my lounge room oh so i

660
00:26:34,950 --> 00:26:32,640
kind of creped ninja like across the

661
00:26:38,630 --> 00:26:36,950
my hands at the windowsill and watch the

662
00:26:39,909 --> 00:26:38,640
ninjas and they climbed up there and

663
00:26:41,590 --> 00:26:39,919

they had a cigarette and then they got

664

00:26:45,269 --> 00:26:41,600

down again so i don't think they did

665

00:26:47,190 --> 00:26:45,279

anything particularly damaging

666

00:26:48,630 --> 00:26:47,200

yeah anyway yes um

667

00:26:50,630 --> 00:26:48,640

so

668

00:26:52,070 --> 00:26:50,640

but yeah back to the new world back to

669

00:26:54,870 --> 00:26:52,080

the blues

670

00:26:56,950 --> 00:26:54,880

who was quoted in the newspaper report

671

00:26:58,789 --> 00:26:56,960

well hell if it if nothing else he knows

672

00:27:02,149 --> 00:26:58,799

how to market his device

673

00:27:04,230 --> 00:27:02,159

i'll give him that i i let the reporter

674

00:27:06,149 --> 00:27:04,240

from the sydney morning herald

675

00:27:08,070 --> 00:27:06,159

know about the video the skeptic zone

676
00:27:10,230 --> 00:27:08,080
put out a few weeks ago showing how the

677
00:27:11,750 --> 00:27:10,240
tricks work and i said look look at this

678
00:27:13,269 --> 00:27:11,760
video and you'll you'll get a better

679
00:27:14,310 --> 00:27:13,279
understanding of what's really going on

680
00:27:15,669 --> 00:27:14,320
here

681
00:27:17,510 --> 00:27:15,679
um

682
00:27:19,190 --> 00:27:17,520
it's it's a mixed it's a double-edged

683
00:27:21,350 --> 00:27:19,200
sword i should say because you never

684
00:27:22,950 --> 00:27:21,360
know when you talk to reporters how the

685
00:27:23,830 --> 00:27:22,960
story will come out

686
00:27:25,669 --> 00:27:23,840
you know

687
00:27:27,590 --> 00:27:25,679
they might wait you out of context in

688
00:27:28,549 --> 00:27:27,600

fact they often do

689

00:27:29,269 --> 00:27:28,559

um

690

00:27:34,310 --> 00:27:29,279

and

691

00:27:35,350 --> 00:27:34,320

see mind you richard that video that we

692

00:27:38,149 --> 00:27:35,360

did for

693

00:27:39,029 --> 00:27:38,159

applied kinesiology which was obviously

694

00:27:40,870 --> 00:27:39,039

um

695

00:27:42,710 --> 00:27:40,880

a reason the reason for that was because

696

00:27:45,110 --> 00:27:42,720

the power balance has been doing really

697

00:27:46,789 --> 00:27:45,120

really well hasn't it oh yes thank you

698

00:27:49,510 --> 00:27:46,799

everybody for for watching that of

699

00:27:51,190 --> 00:27:49,520

course it's got over it's four four five

700

00:27:53,190 --> 00:27:51,200

thousand downloads

701
00:27:54,470 --> 00:27:53,200
from the skeptic's own feed alone and i

702
00:27:56,950 --> 00:27:54,480
think on the

703
00:27:58,710 --> 00:27:56,960
on youtube in fact jason you can have a

704
00:28:00,389 --> 00:27:58,720
quick look for us if i can i might look

705
00:28:01,590 --> 00:28:00,399
i'll just say it's got on youtube it's

706
00:28:03,430 --> 00:28:01,600
going very well it's got lots of

707
00:28:05,909 --> 00:28:03,440
comments

708
00:28:08,789 --> 00:28:05,919
oh dear idea yeah oh there we are yeah

709
00:28:10,710 --> 00:28:08,799
yeah yeah there's so there's 340 views

710
00:28:12,230 --> 00:28:10,720
and four pages of comments i've never

711
00:28:14,549 --> 00:28:12,240
had that many comments on one of my

712
00:28:17,029 --> 00:28:14,559
youtube videos but i will crow and say

713
00:28:19,430 --> 00:28:17,039

that i've had more views okay well it's

714

00:28:21,430 --> 00:28:19,440

only new you know

715

00:28:23,269 --> 00:28:21,440

i have had lots of then thank you for

716

00:28:25,190 --> 00:28:23,279

the people who have been emailing me

717

00:28:26,630 --> 00:28:25,200

saying thank you and they've used it

718

00:28:28,710 --> 00:28:26,640

themselves

719

00:28:30,470 --> 00:28:28,720

yeah they've taught their kids how to do

720

00:28:32,230 --> 00:28:30,480

it and all sorts of things and they've

721

00:28:33,750 --> 00:28:32,240

done it for their kid for kids at

722

00:28:35,510 --> 00:28:33,760

parties or something yeah to show them

723

00:28:39,750 --> 00:28:35,520

how yeah yeah yeah oh god i just sounded

724

00:28:42,789 --> 00:28:41,430

i'm channeling wait you paid them all

725

00:28:47,750 --> 00:28:42,799

five quid

726

00:28:49,990 --> 00:28:47,760

oh dear i wonder if wakefield uses

727

00:28:52,070 --> 00:28:50,000

applied kinesiology now uh jason let me

728

00:28:53,590 --> 00:28:52,080

uh swing back to you

729

00:28:55,430 --> 00:28:53,600

yes richard

730

00:28:58,549 --> 00:28:55,440

as you know we're all very

731

00:29:01,110 --> 00:28:58,559

excited and certainly uh listeners rest

732

00:29:03,510 --> 00:29:01,120

assured that your town australia team

733

00:29:05,510 --> 00:29:03,520

aren't sitting back we uh there's a lot

734

00:29:07,990 --> 00:29:05,520

to do more than we ever anticipated

735

00:29:10,470 --> 00:29:08,000

absolutely but uh god we wouldn't swap

736

00:29:13,590 --> 00:29:10,480

it for anything it's it's so exciting

737

00:29:15,669 --> 00:29:13,600

but jason you've um cooked up something

738

00:29:17,029 --> 00:29:15,679

as like a a side event for town

739

00:29:18,389 --> 00:29:17,039

australia we're going to do a town

740

00:29:19,350 --> 00:29:18,399

australia fringe we're going to have a

741

00:29:20,950 --> 00:29:19,360

few of these

742

00:29:23,029 --> 00:29:20,960

friends

743

00:29:25,269 --> 00:29:23,039

yes it's going to be fantastic excellent

744

00:29:27,430 --> 00:29:25,279

um i kind of thought about it a few days

745

00:29:29,430 --> 00:29:27,440

ago that why not we've got a week

746

00:29:30,630 --> 00:29:29,440

leading up to town australia and we've

747

00:29:32,710 --> 00:29:30,640

got a lot of

748

00:29:34,149 --> 00:29:32,720

exciting things we could do let's have a

749

00:29:36,549 --> 00:29:34,159

few events

750

00:29:39,269 --> 00:29:36,559

so today i i publicized an unofficial

751

00:29:41,029 --> 00:29:39,279

skeptic's open mic night

752

00:29:42,470 --> 00:29:41,039

where we'll give anyone that wants to

753

00:29:45,269 --> 00:29:42,480

get up and talk

754

00:29:46,870 --> 00:29:45,279

on a scientific or skeptical subject

755

00:29:49,190 --> 00:29:46,880

five minutes to talk five minutes to

756

00:29:50,870 --> 00:29:49,200

take questions and answers all right

757

00:29:52,230 --> 00:29:50,880

so far i've got no idea where this is

758

00:29:54,230 --> 00:29:52,240

going to take place but probably in a

759

00:29:55,830 --> 00:29:54,240

pub um so that we'll have a little bit

760

00:29:57,750 --> 00:29:55,840

of alcohol involved

761

00:30:00,310 --> 00:29:57,760

um we've had a few sign ups already it's

762

00:30:01,669 --> 00:30:00,320

on facebook you can find it with uh

763

00:30:03,909 --> 00:30:01,679

if you search for the keywords tam

764

00:30:05,750 --> 00:30:03,919

australia and open mic

765

00:30:07,750 --> 00:30:05,760

uh open mic

766

00:30:08,950 --> 00:30:07,760

you'll find it on facebook or you can go

767

00:30:14,549 --> 00:30:08,960

to my blog

768

00:30:18,310 --> 00:30:15,990

and there's a little advert there or you

769

00:30:19,990 --> 00:30:18,320

can find me on twitter at drunkenmadman

770

00:30:21,750 --> 00:30:20,000

and just ping me a message and i'll let

771

00:30:23,269 --> 00:30:21,760

you know all about it um so that's going

772

00:30:25,590 --> 00:30:23,279

to happen in the week coming up to tam

773

00:30:27,909 --> 00:30:25,600

and how how ironic is that you're not in

774

00:30:30,549 --> 00:30:27,919

fact a drunken madman after all well i

775

00:30:32,070 --> 00:30:30,559

am sometimes oh well all right

776

00:30:33,029 --> 00:30:32,080

that sounds really interesting jason

777

00:30:34,230 --> 00:30:33,039

because

778

00:30:36,310 --> 00:30:34,240

obviously you don't know what you're

779

00:30:38,470 --> 00:30:36,320

going to get right that's right do

780

00:30:40,070 --> 00:30:38,480

people have to apply or they just turn

781

00:30:42,070 --> 00:30:40,080

up on the night and

782

00:30:44,470 --> 00:30:42,080

well i'm expecting some people to let me

783

00:30:46,389 --> 00:30:44,480

know in advance but i don't really mind

784

00:30:48,230 --> 00:30:46,399

i think um you're looking for a very

785

00:30:49,510 --> 00:30:48,240

informal thing i'm looking for a very

786

00:30:51,430 --> 00:30:49,520

very informal thing if you've ever been

787

00:30:53,350 --> 00:30:51,440

to an open mic night for musicians you

788

00:30:54,710 --> 00:30:53,360

just turn up with your guitar and do a

789

00:30:56,070 --> 00:30:54,720

couple of songs you just put your name

790

00:30:56,950 --> 00:30:56,080

on the list at the start of the evening

791

00:31:00,149 --> 00:30:56,960

and

792

00:31:01,750 --> 00:31:00,159

will gauge how long you stay on for

793

00:31:03,110 --> 00:31:01,760

basically i'm really pleased about this

794

00:31:07,029 --> 00:31:03,120

idea because it'll give a lot of people

795

00:31:10,710 --> 00:31:08,549

big names that we're

796

00:31:13,269 --> 00:31:10,720

flying in for tam of course in a very

797

00:31:16,070 --> 00:31:13,279

informal and fun situation which sounds

798

00:31:17,990 --> 00:31:16,080

great to me i hope to come along myself

799

00:31:20,149 --> 00:31:18,000

um but well you haven't confirmed on

800

00:31:21,269 --> 00:31:20,159

facebook i have have you i have indeed

801

00:31:23,269 --> 00:31:21,279

oh you're not showing up in the list

802

00:31:24,870 --> 00:31:23,279

here let's just have a quick look check

803

00:31:26,950 --> 00:31:24,880

the ball listing

804

00:31:30,149 --> 00:31:26,960

check the full listing well on on

805

00:31:32,470 --> 00:31:30,159

another note oh my apologies

806

00:31:34,549 --> 00:31:32,480

on another note i noticed uh a couple of

807

00:31:35,830 --> 00:31:34,559

days ago on twitter that rebecca watson

808

00:31:39,110 --> 00:31:35,840

has said she's planning to have a

809

00:31:40,710 --> 00:31:39,120

skeptic party for tamors as well

810

00:31:44,830 --> 00:31:40,720

so we're gonna have to fit that in

811

00:31:49,110 --> 00:31:47,669

fun does that mean

812

00:31:51,029 --> 00:31:49,120

well i've been to a couple of skeptic

813

00:31:53,909 --> 00:31:51,039

parties in las vegas and yes they're

814

00:31:57,029 --> 00:31:53,919

funny oh oh yeah okay don't worry you'll

815

00:31:59,669 --> 00:31:57,039

find out soon yes i guess we will and

816

00:32:02,549 --> 00:31:59,679

because of course dr hd myself joanne

817

00:32:03,830 --> 00:32:02,559

benamu and iran segev will be at tam las

818

00:32:05,990 --> 00:32:03,840

vegas and we're looking forward to

819

00:32:08,630 --> 00:32:06,000

seeing everybody there

820

00:32:11,430 --> 00:32:08,640

and please please if

821

00:32:13,110 --> 00:32:11,440

if you care to if you enjoy the zone

822

00:32:14,950 --> 00:32:13,120

please don't be shy come up and say

823

00:32:17,590 --> 00:32:14,960

hello we'd love to meet you and have a

824

00:32:19,990 --> 00:32:17,600

chat um we're always very

825

00:32:21,830 --> 00:32:20,000

uh thrilled and honored to to to chat to

826

00:32:23,830 --> 00:32:21,840

people who really enjoy the show and we

827

00:32:25,190 --> 00:32:23,840

certainly get a big charge out of it and

828

00:32:27,110 --> 00:32:25,200

the other thing that listeners should

829

00:32:29,509 --> 00:32:27,120

make a note of is um

830

00:32:31,990 --> 00:32:29,519

if you have seen the website for tam

831

00:32:33,669 --> 00:32:32,000

australia termaustralia.org

832

00:32:35,830 --> 00:32:33,679

the people that did the design for that

833

00:32:37,830 --> 00:32:35,840

ricky and tom from perth

834

00:32:40,149 --> 00:32:37,840

they also designed the skeptic's guide

835

00:32:41,909 --> 00:32:40,159

to the universe t-shirt which is the one

836

00:32:42,950 --> 00:32:41,919

that kind of looks really 60. oh the

837

00:32:45,590 --> 00:32:42,960

craziest one

838

00:32:48,310 --> 00:32:45,600

yeah it's fantastic and so they're doing

839

00:32:50,549 --> 00:32:48,320

all our design for tam australia

840

00:32:52,310 --> 00:32:50,559

and so we're going to be taking with us

841

00:32:55,269 --> 00:32:52,320

some more of their wonderful work to tam

842

00:32:57,590 --> 00:32:55,279

vegas including some flyers and some

843

00:32:59,110 --> 00:32:57,600

posters and some t-shirts

844

00:33:00,950 --> 00:32:59,120

and we've just seen the artwork for the

845

00:33:03,350 --> 00:33:00,960

t-shirts richard and i'm really happy

846

00:33:05,669 --> 00:33:03,360

with it it's fantastic isn't it and the

847

00:33:07,269 --> 00:33:05,679

the new tam logo the one we had before

848

00:33:08,070 --> 00:33:07,279

with the kangaroo and the upside down

849

00:33:11,509 --> 00:33:08,080

stuff

850

00:33:13,430 --> 00:33:11,519

was was uh more or less uh something to

851
00:33:15,269 --> 00:33:13,440
start the ball rolling but now we've got

852
00:33:17,269 --> 00:33:15,279
the official tam logo for australia

853
00:33:19,029 --> 00:33:17,279
which is this lovely design which is

854
00:33:21,190 --> 00:33:19,039
like a molecule

855
00:33:23,509 --> 00:33:21,200
and then in the word tam written in a

856
00:33:25,830 --> 00:33:23,519
molecule it's great ricky and tom are

857
00:33:27,990 --> 00:33:25,840
doing all of this for nada and they have

858
00:33:29,590 --> 00:33:28,000
worked very very hard and we're really

859
00:33:31,029 --> 00:33:29,600
excited about being able to collaborate

860
00:33:32,470 --> 00:33:31,039
with them because their stuff is just

861
00:33:34,710 --> 00:33:32,480
aren't they the nicest people when you

862
00:33:36,830 --> 00:33:34,720
and i went over there last year

863
00:33:38,870 --> 00:33:36,840

and they did that photo shoot with us

864

00:33:40,789 --> 00:33:38,880

absolutely and they complete they

865

00:33:42,549 --> 00:33:40,799

offered to do that off their own bat we

866

00:33:44,389 --> 00:33:42,559

didn't have any role in that at all and

867

00:33:47,029 --> 00:33:44,399

the results have been just

868

00:33:48,630 --> 00:33:47,039

uh uh astonishing yeah absolutely yeah

869

00:33:50,149 --> 00:33:48,640

and i think it's also really important

870

00:33:52,470 --> 00:33:50,159

that we have someone from australia to

871

00:33:54,789 --> 00:33:52,480

do the design and lots of people know

872

00:33:56,549 --> 00:33:54,799

about their work because of the sgu

873

00:33:57,990 --> 00:33:56,559

t-shirts and rebecca watson's been

874

00:34:00,389 --> 00:33:58,000

wearing them around

875

00:34:01,830 --> 00:34:00,399

so i've got one it's great yeah so for

876
00:34:03,590 --> 00:34:01,840
people

877
00:34:05,590 --> 00:34:03,600
who don't know their work head to tam

878
00:34:06,789 --> 00:34:05,600
australia.org and keep your eye out

879
00:34:08,710 --> 00:34:06,799
because there's going to be lots more

880
00:34:10,470 --> 00:34:08,720
fantastic stuff from ricky and tom yeah

881
00:34:12,629 --> 00:34:10,480
we owe them a lot they're they're great

882
00:34:14,790 --> 00:34:12,639
people and and talented

883
00:34:16,710 --> 00:34:14,800
absolutely skilled and talented so thank

884
00:34:17,829 --> 00:34:16,720
you very much for that now drunken

885
00:34:19,829 --> 00:34:17,839
madman

886
00:34:21,430 --> 00:34:19,839
can you tell us oh we're looking you've

887
00:34:22,869 --> 00:34:21,440
got the site i've got the site right at

888
00:34:24,389 --> 00:34:22,879

the front right in front of you it

889

00:34:26,389 --> 00:34:24,399

doesn't there's a big picture of james

890

00:34:29,349 --> 00:34:26,399

randy himself looking

891

00:34:31,669 --> 00:34:29,359

uh what's the word skeptical

892

00:34:33,669 --> 00:34:31,679

he's in he's in finland at the moment i

893

00:34:34,869 --> 00:34:33,679

think is he yeah it's bloody freezing

894

00:34:37,430 --> 00:34:34,879

there actually it's summer isn't it

895

00:34:39,950 --> 00:34:37,440

summer but still probably freezing time

896

00:34:43,669 --> 00:34:39,960

but my goodness me i mean

897

00:34:46,310 --> 00:34:43,679

82 i think almost 82 and gallivanting

898

00:34:48,629 --> 00:34:46,320

around the world it's just when i'm 82 i

899

00:34:50,389 --> 00:34:48,639

hope i'm color around the world if i'm

900

00:34:54,230 --> 00:34:50,399

doing that at that age it'll be because

901
00:34:56,230 --> 00:34:54,240
we've invented zombifying technology

902
00:34:58,470 --> 00:34:56,240
but i'll be moving yeah

903
00:35:01,750 --> 00:34:58,480
and i must say that if listeners haven't

904
00:35:04,630 --> 00:35:01,760
seen his uh youtube video he made

905
00:35:06,390 --> 00:35:04,640
commenting about his uh experiences with

906
00:35:09,109 --> 00:35:06,400
chemotherapy

907
00:35:13,349 --> 00:35:09,119
it's one of the most inspirational

908
00:35:15,109 --> 00:35:13,359
wonderful videos you can imagine um

909
00:35:18,230 --> 00:35:15,119
whoever he was he could be randy or the

910
00:35:20,630 --> 00:35:18,240
guy next door it's a fantastic video and

911
00:35:22,630 --> 00:35:20,640
hats off to randy for doing that

912
00:35:24,630 --> 00:35:22,640
so richard was that a segue into the

913
00:35:26,390 --> 00:35:24,640

awful story that's happened in australia

914

00:35:28,550 --> 00:35:26,400

in the last couple of days

915

00:35:30,550 --> 00:35:28,560

this has been blocked by a few people in

916

00:35:32,950 --> 00:35:30,560

the last few days but basically what

917

00:35:35,829 --> 00:35:32,960

happened was there was a lady in western

918

00:35:36,630 --> 00:35:35,839

australia perth western australia

919

00:35:37,750 --> 00:35:36,640

who

920

00:35:40,550 --> 00:35:37,760

died from

921

00:35:41,990 --> 00:35:40,560

bowel cancer a number of years ago 2005

922

00:35:43,990 --> 00:35:42,000

actually

923

00:35:45,829 --> 00:35:44,000

but there's recently been an inquest

924

00:35:48,310 --> 00:35:45,839

going on in perth

925

00:35:50,710 --> 00:35:48,320

at the request of her family

926
00:35:53,030 --> 00:35:50,720
um just to work out the circumstances

927
00:35:55,349 --> 00:35:53,040
surrounding her death so

928
00:35:57,670 --> 00:35:55,359
so her name is penelope dingle

929
00:35:59,990 --> 00:35:57,680
and she died in 2005 from untreated

930
00:36:02,390 --> 00:36:00,000
bowel cancer at the age of 45 which is

931
00:36:04,550 --> 00:36:02,400
very young that is really young she was

932
00:36:06,550 --> 00:36:04,560
diagnosed in 2003

933
00:36:10,870 --> 00:36:06,560
and this was after she first presented

934
00:36:12,710 --> 00:36:10,880
with bleeding from the bowel in 2001

935
00:36:14,710 --> 00:36:12,720
and she had a colonoscopy and she was

936
00:36:17,270 --> 00:36:14,720
advised by doctors that she needed

937
00:36:19,750 --> 00:36:17,280
surgery to remove the cancer

938
00:36:20,870 --> 00:36:19,760

but she declined conventional medical

939

00:36:22,470 --> 00:36:20,880
treatment

940

00:36:24,230 --> 00:36:22,480
instead deciding that she wanted to

941

00:36:26,950 --> 00:36:24,240
follow a regimen of alternative

942

00:36:29,829 --> 00:36:26,960
treatments including special diets

943

00:36:31,990 --> 00:36:29,839
vitamins and homeopathy

944

00:36:33,030 --> 00:36:32,000
which as we know is

945

00:36:34,950 --> 00:36:33,040
water

946

00:36:37,109 --> 00:36:34,960
witchcraft yeah

947

00:36:39,109 --> 00:36:37,119
so her husband

948

00:36:41,910 --> 00:36:39,119
is actually a prominent professor of

949

00:36:43,190 --> 00:36:41,920
environmental toxicology at a university

950

00:36:44,790 --> 00:36:43,200
in perth

951
00:36:47,670 --> 00:36:44,800
and according to the evidence given at

952
00:36:48,790 --> 00:36:47,680
the inquest from friends of penelope

953
00:36:50,870 --> 00:36:48,800
dingle

954
00:36:53,270 --> 00:36:50,880
she and her husband had made a pact with

955
00:36:55,510 --> 00:36:53,280
a homeopath by the name of francine

956
00:36:57,589 --> 00:36:55,520
skrajan

957
00:37:00,069 --> 00:36:57,599
who had asked her to not take any

958
00:37:03,829 --> 00:37:00,079
conventional therapies and to just

959
00:37:05,910 --> 00:37:03,839
keep taking her homeopathic remedies

960
00:37:08,390 --> 00:37:05,920
and mrs dingle was in constant phone

961
00:37:10,470 --> 00:37:08,400
contact with this homeopath she had

962
00:37:13,910 --> 00:37:10,480
never at any stage according to the

963
00:37:16,550 --> 00:37:13,920

information i have saw her in person

964

00:37:19,349 --> 00:37:16,560

and she advised her to not even seek

965

00:37:20,550 --> 00:37:19,359

pain relief for her bowel cancer

966

00:37:21,430 --> 00:37:20,560

oh

967

00:37:25,030 --> 00:37:21,440

so

968

00:37:27,589 --> 00:37:25,040

um a friend of the couple um have um

969

00:37:29,589 --> 00:37:27,599

said during the inquiry that the they

970

00:37:30,790 --> 00:37:29,599

were enthralled and entrapped in the

971

00:37:33,109 --> 00:37:30,800

spell

972

00:37:34,870 --> 00:37:33,119

of mrs crayon

973

00:37:36,550 --> 00:37:34,880

and a report from the west australian

974

00:37:39,030 --> 00:37:36,560

described this as

975

00:37:41,109 --> 00:37:39,040

they were they had so much faith in this

976

00:37:42,870 --> 00:37:41,119

homeopath she was totally

977

00:37:44,390 --> 00:37:42,880

the woman who died was totally in her

978

00:37:46,550 --> 00:37:44,400

control

979

00:37:48,390 --> 00:37:46,560

yeah i can understand that yeah

980

00:37:50,710 --> 00:37:48,400

but it turns out that

981

00:37:53,030 --> 00:37:50,720

mrs dingle's diaries have been submitted

982

00:37:55,190 --> 00:37:53,040

as evidence of the inquiry

983

00:37:58,069 --> 00:37:55,200

and apparently she made a pact

984

00:37:59,670 --> 00:37:58,079

with this homeopath with her husband

985

00:38:01,990 --> 00:37:59,680

that they would never take conventional

986

00:38:03,589 --> 00:38:02,000

therapies and when she got better from

987

00:38:07,190 --> 00:38:03,599

her bowel cancer her husband would write

988

00:38:09,270 --> 00:38:07,200

a book about how special diets vitamins

989

00:38:10,470 --> 00:38:09,280

and homeopathy can cure cancer and

990

00:38:13,829 --> 00:38:10,480

airplanes

991

00:38:16,950 --> 00:38:15,430

now of course tragically that didn't

992

00:38:20,069 --> 00:38:16,960

happen

993

00:38:22,069 --> 00:38:20,079

um but also one of her friends

994

00:38:24,870 --> 00:38:22,079

one of the friends of mrs dingle

995

00:38:27,430 --> 00:38:24,880

has testified that she came to visit her

996

00:38:29,670 --> 00:38:27,440

in october 2003

997

00:38:31,270 --> 00:38:29,680

and she was told on the phone that she

998

00:38:33,510 --> 00:38:31,280

was recovering quite well and responding

999

00:38:35,829 --> 00:38:33,520

to treatment quite well but when she saw

1000

00:38:36,950 --> 00:38:35,839

her she was so shocked to see how ill

1001
00:38:40,310 --> 00:38:36,960
she was

1002
00:38:42,150 --> 00:38:40,320
that she burst into tears

1003
00:38:44,390 --> 00:38:42,160
and then she called up the homeopath

1004
00:38:46,790 --> 00:38:44,400
herself to ask her what was happening

1005
00:38:48,150 --> 00:38:46,800
and the homeopath dismissed her concerns

1006
00:38:51,270 --> 00:38:48,160
and said that

1007
00:38:54,069 --> 00:38:51,280
mrs dingle's pain was in her head

1008
00:38:56,470 --> 00:38:54,079
and she merely had constipation

1009
00:38:58,550 --> 00:38:56,480
over the phone over the phone according

1010
00:39:00,069 --> 00:38:58,560
to the information that is available to

1011
00:39:05,270 --> 00:39:00,079
me

1012
00:39:06,710 --> 00:39:05,280
visit this lady she simply consulted

1013
00:39:08,790 --> 00:39:06,720

over the phone and it wouldn't make much

1014

00:39:09,589 --> 00:39:08,800

difference if she did i guess

1015

00:39:11,910 --> 00:39:09,599

no

1016

00:39:13,670 --> 00:39:11,920

but she also insisted that mrs dingle

1017

00:39:16,150 --> 00:39:13,680

who passed away did not take any other

1018

00:39:16,950 --> 00:39:16,160

forms of medicine now it gets worse than

1019

00:39:19,030 --> 00:39:16,960

that

1020

00:39:20,870 --> 00:39:19,040

worse than this it does i'm afraid it

1021

00:39:23,190 --> 00:39:20,880

does get worse than this

1022

00:39:25,750 --> 00:39:23,200

so eventually it got so bad that she did

1023

00:39:28,069 --> 00:39:25,760

agree to have a morphine injection and

1024

00:39:30,550 --> 00:39:28,079

she was taken to hospital but at that

1025

00:39:33,190 --> 00:39:30,560

point she was so ill that they did

1026

00:39:34,150 --> 00:39:33,200

conduct emergency surgery but it was too

1027

00:39:36,390 --> 00:39:34,160

late

1028

00:39:37,750 --> 00:39:36,400

and she was advised by

1029

00:39:42,069 --> 00:39:37,760

a nurse

1030

00:39:43,190 --> 00:39:42,079

and i have to find a quote here

1031

00:39:44,710 --> 00:39:43,200

um

1032

00:39:46,550 --> 00:39:44,720

quite honestly it was like watching

1033

00:39:49,270 --> 00:39:46,560

someone being tortured it was almost

1034

00:39:51,589 --> 00:39:49,280

impossible to believe this was happening

1035

00:39:53,589 --> 00:39:51,599

and this was from her visiting nurse mrs

1036

00:39:55,510 --> 00:39:53,599

brown

1037

00:39:57,349 --> 00:39:55,520

and she said the next morning mrs dingle

1038

00:39:59,349 --> 00:39:57,359

was rushed to hospital she only agreed

1039

00:40:01,430 --> 00:39:59,359

to have emergency surgery after staff

1040

00:40:03,190 --> 00:40:01,440

told her she had a complete bowel

1041

00:40:05,510 --> 00:40:03,200

obstruction and would throw up fecal

1042

00:40:07,270 --> 00:40:05,520

matter before dying a very painful death

1043

00:40:08,790 --> 00:40:07,280

within 24 hours

1044

00:40:10,710 --> 00:40:08,800

that's horrible

1045

00:40:12,790 --> 00:40:10,720

so apparently she went to hospital and

1046

00:40:14,390 --> 00:40:12,800

she requested an enema and the staff

1047

00:40:16,470 --> 00:40:14,400

said there's no way we can give you an

1048

00:40:18,069 --> 00:40:16,480

enema because your bowel is completely

1049

00:40:20,630 --> 00:40:18,079

obstructed

1050

00:40:23,109 --> 00:40:20,640

and there was nothing they could do and

1051
00:40:26,550 --> 00:40:23,119
that was the outcome after i think she

1052
00:40:28,470 --> 00:40:26,560
was diagnosed in 2002 initially

1053
00:40:29,990 --> 00:40:28,480
and by 2005

1054
00:40:32,390 --> 00:40:30,000
that was it do you think that's going to

1055
00:40:33,670 --> 00:40:32,400
appear in this guy's book

1056
00:40:36,470 --> 00:40:33,680
i don't think he's going to write the

1057
00:40:38,950 --> 00:40:36,480
book to tell you the truth richard but

1058
00:40:40,550 --> 00:40:38,960
this this is peter dingle isn't it the

1059
00:40:43,190 --> 00:40:40,560
man who wants to set himself up was the

1060
00:40:44,710 --> 00:40:43,200
australian mccullough

1061
00:40:46,950 --> 00:40:44,720
i don't know about that but

1062
00:40:48,630 --> 00:40:46,960
have you seen his website no i haven't

1063
00:40:50,630 --> 00:40:48,640

ah well he's

1064

00:40:52,870 --> 00:40:50,640

almost a nicola clone on his website

1065

00:40:55,430 --> 00:40:52,880

he's got that smiling

1066

00:40:56,230 --> 00:40:55,440

white toothed sort of grinning doctor

1067

00:40:58,470 --> 00:40:56,240

thing

1068

00:40:59,990 --> 00:40:58,480

um i don't want to be at all libelous

1069

00:41:03,030 --> 00:41:00,000

but he does look like he's setting

1070

00:41:04,829 --> 00:41:03,040

himself up as a i'm a cola clone yeah

1071

00:41:07,270 --> 00:41:04,839

well you also probably made the

1072

00:41:09,510 --> 00:41:07,280

connection um jason and this is not

1073

00:41:12,150 --> 00:41:09,520

necessarily connected to this case

1074

00:41:13,990 --> 00:41:12,160

but he is also the supervisor of

1075

00:41:16,069 --> 00:41:14,000

um an anti-vaxx

1076

00:41:18,309 --> 00:41:16,079

avn sympathizer by the name of judy

1077

00:41:23,270 --> 00:41:18,319

williamson that's right yeah i mean

1078

00:41:29,030 --> 00:41:25,990

yeah judy wileyman is a student a phd

1079

00:41:30,790 --> 00:41:29,040

student of um peter

1080

00:41:33,190 --> 00:41:30,800

dingle

1081

00:41:35,510 --> 00:41:33,200

and she was representing

1082

00:41:38,069 --> 00:41:35,520

meryl dory at a meeting with the wa

1083

00:41:41,510 --> 00:41:38,079

department of health last monday

1084

00:41:43,190 --> 00:41:41,520

about vaccines in perth and she gave a

1085

00:41:45,430 --> 00:41:43,200

talk with meryl dory at the state

1086

00:41:47,030 --> 00:41:45,440

library which everyone who listens to

1087

00:41:48,950 --> 00:41:47,040

the podcast would know happened last

1088

00:41:50,870 --> 00:41:48,960

week have you seen the

1089

00:41:51,990 --> 00:41:50,880

the page written by the avn about that

1090

00:41:53,750 --> 00:41:52,000

meeting

1091

00:41:56,230 --> 00:41:53,760

yes i have i've seen a couple of blogs

1092

00:41:57,910 --> 00:41:56,240

about that yeah yeah how it was a great

1093

00:42:00,870 --> 00:41:57,920

success and she said

1094

00:42:02,710 --> 00:42:00,880

meryl said blah blah blah and there were

1095

00:42:05,030 --> 00:42:02,720

three skeptics in the audience who were

1096

00:42:06,390 --> 00:42:05,040

too busy blogging and twittering

1097

00:42:08,470 --> 00:42:06,400

when they could have been listening and

1098

00:42:11,349 --> 00:42:08,480

learning something i did see that i

1099

00:42:13,910 --> 00:42:11,359

didn't see that yeah yeah but once again

1100

00:42:15,670 --> 00:42:13,920

meryl has blamed the skeptics but this

1101

00:42:17,109 --> 00:42:15,680

time interestingly

1102

00:42:19,430 --> 00:42:17,119

she blamed the skeptics for having to

1103

00:42:21,190 --> 00:42:19,440

get more security and she says it cost a

1104

00:42:23,670 --> 00:42:21,200

hundred dollars to get two more security

1105

00:42:25,589 --> 00:42:23,680

guards at the library but interestingly

1106

00:42:27,829 --> 00:42:25,599

richard this time she's used skeptics

1107

00:42:31,349 --> 00:42:27,839

with a capital s

1108

00:42:33,109 --> 00:42:31,359

which infers australian skeptics

1109

00:42:34,630 --> 00:42:33,119

what what does she think will happen do

1110

00:42:36,550 --> 00:42:34,640

you think that does she think that the

1111

00:42:37,910 --> 00:42:36,560

skeptics will come along

1112

00:42:40,230 --> 00:42:37,920

with

1113

00:42:42,470 --> 00:42:40,240

arms or something and threaten them

1114

00:42:44,790 --> 00:42:42,480

physically i mean this is she claims

1115

00:42:46,230 --> 00:42:44,800

that some threats were received somehow

1116

00:42:48,710 --> 00:42:46,240

whether it was a phone call or an email

1117

00:42:49,510 --> 00:42:48,720

or whatever but i can't picture any of

1118

00:42:53,510 --> 00:42:49,520

our

1119

00:42:55,190 --> 00:42:53,520

supporters um doing such a thing

1120

00:42:57,510 --> 00:42:55,200

yeah it's a conjecture

1121

00:43:00,069 --> 00:42:57,520

it is it's it sounds crazy i mean it's

1122

00:43:02,069 --> 00:43:00,079

similar to the fact that she made a big

1123

00:43:04,390 --> 00:43:02,079

song and dance about how she kept seven

1124

00:43:06,950 --> 00:43:04,400

seats free for the department of health

1125

00:43:09,270 --> 00:43:06,960

and they didn't turn up well

1126

00:43:11,589 --> 00:43:09,280

i spoke to a contact at my contact with

1127

00:43:13,670 --> 00:43:11,599

the wa department of health and he said

1128

00:43:15,990 --> 00:43:13,680

they never planned to turn up so it's

1129

00:43:18,150 --> 00:43:16,000

all about drama it's her saying i had to

1130

00:43:19,270 --> 00:43:18,160

get security guards because the skeptics

1131

00:43:20,790 --> 00:43:19,280

threatened me

1132

00:43:22,870 --> 00:43:20,800

people have asked her for evidence on

1133

00:43:24,470 --> 00:43:22,880

her blog she has yet to produce any

1134

00:43:27,109 --> 00:43:24,480

evidence

1135

00:43:29,030 --> 00:43:27,119

so it's all about drama that's all i can

1136

00:43:31,510 --> 00:43:29,040

think it is oh what else do you have

1137

00:43:33,510 --> 00:43:31,520

there well um our listeners would be

1138

00:43:35,510 --> 00:43:33,520

familiar if they are regular listeners

1139

00:43:37,349 --> 00:43:35,520

of the evidence check that happened in

1140

00:43:39,030 --> 00:43:37,359

parliament in the uk

1141

00:43:41,670 --> 00:43:39,040

some months ago

1142

00:43:44,069 --> 00:43:41,680

where the committee for science uh

1143

00:43:46,790 --> 00:43:44,079

decided that there was no

1144

00:43:48,710 --> 00:43:46,800

uh good evidence to support homeopathy

1145

00:43:50,390 --> 00:43:48,720

being paid for by the nhs the national

1146

00:43:52,309 --> 00:43:50,400

health system

1147

00:43:53,829 --> 00:43:52,319

is the nhs or anything yeah

1148

00:43:55,190 --> 00:43:53,839

yeah

1149

00:43:56,790 --> 00:43:55,200

and so the recommendation from the

1150

00:43:58,950 --> 00:43:56,800

committee was that the government

1151
00:44:00,390 --> 00:43:58,960
doesn't pay for homeopathy anymore in

1152
00:44:02,790 --> 00:44:00,400
the uk

1153
00:44:04,550 --> 00:44:02,800
now the implications of this are

1154
00:44:06,950 --> 00:44:04,560
huge because there are still four

1155
00:44:08,390 --> 00:44:06,960
homeopathic hospitals in the uk there's

1156
00:44:09,990 --> 00:44:08,400
one right next to great organ street

1157
00:44:11,910 --> 00:44:10,000
children's hospital in london that's

1158
00:44:14,230 --> 00:44:11,920
right right there and that's and can you

1159
00:44:15,750 --> 00:44:14,240
actually you're from wales but can you

1160
00:44:17,190 --> 00:44:15,760
explain to our listeners what the

1161
00:44:18,950 --> 00:44:17,200
implications is that it's next to the

1162
00:44:21,109 --> 00:44:18,960
great ormond hospital because apparently

1163
00:44:23,030 --> 00:44:21,119

that's quite yeah great holding street

1164

00:44:26,069 --> 00:44:23,040

hospital is

1165

00:44:28,470 --> 00:44:26,079

massively famous in the uk and other

1166

00:44:30,069 --> 00:44:28,480

parts of the world obviously um for

1167

00:44:32,069 --> 00:44:30,079

being pretty much

1168

00:44:34,150 --> 00:44:32,079

kind of a center of excellence for for

1169

00:44:35,510 --> 00:44:34,160

children's treatment and for

1170

00:44:37,829 --> 00:44:35,520

i mean through the eighties when i was

1171

00:44:40,950 --> 00:44:37,839

growing up they had massive drives and

1172

00:44:42,630 --> 00:44:40,960

they were in in the media all the time

1173

00:44:44,630 --> 00:44:42,640

um for the good work that they do for

1174

00:44:46,069 --> 00:44:44,640

children's medicine and

1175

00:44:48,870 --> 00:44:46,079

you know being right next to great

1176

00:44:51,990 --> 00:44:48,880

ormond street it's kind of like

1177

00:44:53,670 --> 00:44:52,000

sticking um let me see

1178

00:44:57,109 --> 00:44:53,680

the power balance factory right next to

1179

00:44:57,119 --> 00:45:00,230

it's pretty bad

1180

00:45:04,710 --> 00:45:02,390

well as a result of these findings from

1181

00:45:06,150 --> 00:45:04,720

the committee they potentially will lose

1182

00:45:09,750 --> 00:45:06,160

their funding and i know that one

1183

00:45:11,430 --> 00:45:09,760

hospital closed down in kent in 2009

1184

00:45:13,510 --> 00:45:11,440

because the nhs pulled their funding

1185

00:45:14,470 --> 00:45:13,520

from them

1186

00:45:16,230 --> 00:45:14,480

anyway

1187

00:45:19,670 --> 00:45:16,240

there have obviously been

1188

00:45:21,190 --> 00:45:19,680

opponents to this decision although i

1189

00:45:22,790 --> 00:45:21,200

might emphasize that nothing's happened

1190

00:45:24,069 --> 00:45:22,800

yet it was just a finding from the

1191

00:45:25,829 --> 00:45:24,079

committee

1192

00:45:30,230 --> 00:45:25,839

uh one of these people is a guy called

1193

00:45:34,470 --> 00:45:31,910

i think he's the shadow minister for

1194

00:45:36,870 --> 00:45:34,480

alternative health and so on

1195

00:45:38,309 --> 00:45:36,880

um if i remember correctly and i could

1196

00:45:40,230 --> 00:45:38,319

be slightly wrong in this he was caught

1197

00:45:42,230 --> 00:45:40,240

up in an expenses scandal not that long

1198

00:45:45,030 --> 00:45:42,240

ago for spending 800 of parliamentary

1199

00:45:49,270 --> 00:45:46,550

astrology software

1200

00:45:52,230 --> 00:45:49,280

is that him that's him yes because

1201

00:45:54,870 --> 00:45:52,240

i heard that on um the bbc friday the

1202

00:45:56,710 --> 00:45:54,880

news quiz yes yes so that's david

1203

00:46:00,150 --> 00:45:56,720

trudeau absolutely

1204

00:46:01,670 --> 00:46:00,160

right well he's um he's obviously uh

1205

00:46:03,349 --> 00:46:01,680

gone into parliament and said that he

1206

00:46:05,750 --> 00:46:03,359

doesn't think that we should take money

1207

00:46:07,430 --> 00:46:05,760

away from complementary medicine well of

1208

00:46:09,750 --> 00:46:07,440

course he doesn't it's his portfolio

1209

00:46:12,309 --> 00:46:09,760

well yeah but there was a lovely quote

1210

00:46:14,230 --> 00:46:12,319

from that episode of the news quiz of uh

1211

00:46:16,069 --> 00:46:14,240

well of course astrology is related to

1212

00:46:24,630 --> 00:46:16,079

complementary alternative medicine they

1213

00:46:24,640 --> 00:46:29,270

how much did he spend on that software

1214

00:46:33,589 --> 00:46:31,510

a huge amount of money it's a ridiculous

1215

00:46:35,190 --> 00:46:33,599

amount of money yeah yeah i don't charge

1216

00:46:36,630 --> 00:46:35,200

that much for software and i develop

1217

00:46:39,109 --> 00:46:36,640

software yeah but you don't have

1218

00:46:41,270 --> 00:46:39,119

astrology software do you and i wouldn't

1219

00:46:43,190 --> 00:46:41,280

although why i wrote a numerology

1220

00:46:45,270 --> 00:46:43,200

program once just for a demo of how to

1221

00:46:48,470 --> 00:46:45,280

turn text into numbers

1222

00:46:50,630 --> 00:46:48,480

and subscribers to the skeptic magazine

1223

00:46:54,230 --> 00:46:50,640

from australia can read their astrology

1224

00:46:56,710 --> 00:46:54,240

every month every quarter in the skeptic

1225

00:47:00,069 --> 00:46:56,720

as written by our very own astrologer dr

1226

00:47:01,589 --> 00:47:00,079

duath ecaf yes and hang on can we play

1227

00:47:03,190 --> 00:47:01,599

that backwards

1228

00:47:06,630 --> 00:47:03,200

yeah listeners might want to think of

1229

00:47:08,710 --> 00:47:06,640

the words the name do f e caf and play

1230

00:47:10,950 --> 00:47:08,720

them backwards yes yeah okay that's

1231

00:47:12,630 --> 00:47:10,960

that's your homework listeners

1232

00:47:14,069 --> 00:47:12,640

so anyway i'm i'm getting this

1233

00:47:15,430 --> 00:47:14,079

information from a student spell them

1234

00:47:17,270 --> 00:47:15,440

backwards actually

1235

00:47:19,030 --> 00:47:17,280

yeah or listen to them

1236

00:47:20,550 --> 00:47:19,040

i don't know if that would work well

1237

00:47:24,069 --> 00:47:20,560

doesn't jesus sound like sausage

1238

00:47:28,550 --> 00:47:25,910

but you're always thinking about eating

1239

00:47:32,069 --> 00:47:30,150

anyway

1240

00:47:33,990 --> 00:47:32,079

this story comes from the new scientist

1241

00:47:36,150 --> 00:47:34,000

it was published on the 3rd of june and

1242

00:47:37,589 --> 00:47:36,160

it's written by michael brooks and

1243

00:47:39,190 --> 00:47:37,599

basically it's about the peer review

1244

00:47:40,470 --> 00:47:39,200

system in science

1245

00:47:42,069 --> 00:47:40,480

now the reason i mentioned david

1246

00:47:44,470 --> 00:47:42,079

trojenik is because he went into

1247

00:47:46,390 --> 00:47:44,480

parliament and he said i have evidence

1248

00:47:48,150 --> 00:47:46,400

that homeopathy works

1249

00:47:52,230 --> 00:47:48,160

in particular i have evidence that it

1250

00:47:55,750 --> 00:47:54,069

it's a big claim well

1251
00:47:57,510 --> 00:47:55,760
it's a good dovetail to what we've just

1252
00:47:59,990 --> 00:47:57,520
discussed actually

1253
00:48:01,510 --> 00:48:00,000
but um basically he's basing his claims

1254
00:48:03,750 --> 00:48:01,520
on a paper that was published in the

1255
00:48:05,270 --> 00:48:03,760
international journal of oncology

1256
00:48:06,950 --> 00:48:05,280
in february

1257
00:48:09,270 --> 00:48:06,960
now listeners that follow my blog would

1258
00:48:11,750 --> 00:48:09,280
know that i took this paper to pieces

1259
00:48:15,190 --> 00:48:11,760
yes and after i took it to pieces

1260
00:48:16,870 --> 00:48:15,200
orac did david gorsky at scienceblogs

1261
00:48:18,150 --> 00:48:16,880
there were so many problems with this

1262
00:48:20,790 --> 00:48:18,160
paper

1263
00:48:23,510 --> 00:48:20,800

it was an absolute fail and at the end

1264

00:48:25,109 --> 00:48:23,520

of my blog i said the journal of uh

1265

00:48:27,430 --> 00:48:25,119

international journal of oncology has an

1266

00:48:29,829 --> 00:48:27,440

impact factor of 2.4 but a failed factor

1267

00:48:32,549 --> 00:48:29,839

of 10 to 23.

1268

00:48:34,630 --> 00:48:32,559

but i was sent this by a friend on

1269

00:48:36,549 --> 00:48:34,640

twitter david briggs

1270

00:48:38,710 --> 00:48:36,559

the full text and i took it to pieces it

1271

00:48:41,190 --> 00:48:38,720

took me a whole day to actually

1272

00:48:42,710 --> 00:48:41,200

analyze what was wrong with it

1273

00:48:44,470 --> 00:48:42,720

but basically the major thing that was

1274

00:48:46,710 --> 00:48:44,480

wrong with this paper was they were

1275

00:48:48,710 --> 00:48:46,720

talking about homeopathy killing cancer

1276

00:48:50,309 --> 00:48:48,720

cells in cell culture

1277

00:48:52,630 --> 00:48:50,319

now cell culture means that you take

1278

00:48:54,069 --> 00:48:52,640

cells and you grow them in little dishes

1279

00:48:57,750 --> 00:48:54,079

and then you treat them with a certain

1280

00:48:59,750 --> 00:48:57,760

type of um compound exactly what you do

1281

00:49:02,630 --> 00:48:59,760

yeah that's this is what i do every day

1282

00:49:04,230 --> 00:49:02,640

yeah every day i do this and they

1283

00:49:05,829 --> 00:49:04,240

claimed that

1284

00:49:07,349 --> 00:49:05,839

the homeopathic treatment killed the

1285

00:49:09,270 --> 00:49:07,359

cells better than

1286

00:49:11,109 --> 00:49:09,280

anything else

1287

00:49:12,549 --> 00:49:11,119

but the biggest problem in this

1288

00:49:14,950 --> 00:49:12,559

particular paper

1289

00:49:16,790 --> 00:49:14,960

was that the actual thing they dissolved

1290

00:49:18,549 --> 00:49:16,800

the homeopathy in

1291

00:49:21,670 --> 00:49:18,559

also killed the cells

1292

00:49:23,270 --> 00:49:21,680

to a degree of about 30 percent

1293

00:49:24,549 --> 00:49:23,280

now there were no statistics done in

1294

00:49:26,230 --> 00:49:24,559

this paper

1295

00:49:28,870 --> 00:49:26,240

so there was no way to know if there was

1296

00:49:30,549 --> 00:49:28,880

a statistical difference between the

1297

00:49:31,750 --> 00:49:30,559

control treatment that you call it which

1298

00:49:32,870 --> 00:49:31,760

is the treatment that's not supposed to

1299

00:49:35,349 --> 00:49:32,880

do anything

1300

00:49:38,390 --> 00:49:35,359

and the homeopathic treatment

1301
00:49:40,150 --> 00:49:38,400
they also did analysis which they didn't

1302
00:49:42,630 --> 00:49:40,160
quantitate they just looked at a couple

1303
00:49:44,630 --> 00:49:42,640
of i think they looked at 14 cells and

1304
00:49:46,630 --> 00:49:44,640
said oh look they're dying

1305
00:49:49,109 --> 00:49:46,640
but they didn't do more than 14 and in

1306
00:49:51,430 --> 00:49:49,119
science you need to do maybe 10 000

1307
00:49:54,790 --> 00:49:51,440
cells not just 14 cells

1308
00:49:56,630 --> 00:49:54,800
14 14 cells that's ridiculous yes

1309
00:49:58,230 --> 00:49:56,640
classically that's yeah small sample

1310
00:50:00,630 --> 00:49:58,240
size at that point you you're going it's

1311
00:50:01,910 --> 00:50:00,640
like well now sorry yeah well that's

1312
00:50:03,990 --> 00:50:01,920
right but the interesting thing about

1313
00:50:05,910 --> 00:50:04,000

this paper was that it was picked up by

1314

00:50:07,829 --> 00:50:05,920

people like homeopathy plus which we've

1315

00:50:09,829 --> 00:50:07,839

mentioned on the show before

1316

00:50:12,230 --> 00:50:09,839

and that's because they always make

1317

00:50:15,190 --> 00:50:12,240

outrageous claims and in particular they

1318

00:50:18,069 --> 00:50:15,200

were taken to task by the tga

1319

00:50:19,670 --> 00:50:18,079

several months ago and requested to put

1320

00:50:21,349 --> 00:50:19,680

a retraction on their website and they

1321

00:50:23,829 --> 00:50:21,359

didn't do it

1322

00:50:25,910 --> 00:50:23,839

and they sent out an e-newsletter saying

1323

00:50:28,309 --> 00:50:25,920

homeopathy better than chemotherapy for

1324

00:50:29,750 --> 00:50:28,319

cancer for breast cancer

1325

00:50:32,549 --> 00:50:29,760

now i went through this paper with a

1326
00:50:35,270 --> 00:50:32,559
fine-tooth comb and i found one sentence

1327
00:50:37,109 --> 00:50:35,280
in the discussion that said

1328
00:50:38,630 --> 00:50:37,119
maybe this might do something for breast

1329
00:50:41,109 --> 00:50:38,640
cancer but we don't know yet we haven't

1330
00:50:42,870 --> 00:50:41,119
decided what's happened is it's been

1331
00:50:45,190 --> 00:50:42,880
picked up by people who are sympathetic

1332
00:50:47,030 --> 00:50:45,200
to homeopathy and they've taken off with

1333
00:50:48,710 --> 00:50:47,040
it and said homeopathy cures breast

1334
00:50:51,349 --> 00:50:48,720
cancer

1335
00:50:53,349 --> 00:50:51,359
now the whole point of this article from

1336
00:50:56,069 --> 00:50:53,359
michael brooks is that the peer review

1337
00:50:58,390 --> 00:50:56,079
process in science is stuffed

1338
00:51:00,950 --> 00:50:58,400

because if this got published

1339

00:51:03,349 --> 00:51:00,960

there's no way for people to know who

1340

00:51:05,670 --> 00:51:03,359

are not scientists that it's not valid

1341

00:51:07,510 --> 00:51:05,680

unless you are a scientist like myself

1342

00:51:09,829 --> 00:51:07,520

or david gorsky who can sit down and

1343

00:51:11,990 --> 00:51:09,839

read the whole paper and take a day

1344

00:51:13,349 --> 00:51:12,000

to critically analyze it why would you

1345

00:51:15,030 --> 00:51:13,359

know any different

1346

00:51:18,230 --> 00:51:15,040

this is this is a very good point and it

1347

00:51:19,990 --> 00:51:18,240

it reminds me of the the term

1348

00:51:21,270 --> 00:51:20,000

scallop

1349

00:51:22,790 --> 00:51:21,280

where

1350

00:51:25,670 --> 00:51:22,800

and it happened to be the other night

1351

00:51:27,270 --> 00:51:25,680

when somebody said um

1352

00:51:30,630 --> 00:51:27,280

i was talking about the

1353

00:51:32,870 --> 00:51:30,640

australian skeptics 100 000 prize for

1354

00:51:34,710 --> 00:51:32,880

claims of the paranormal

1355

00:51:36,790 --> 00:51:34,720

and they said oh really oh that's great

1356

00:51:39,510 --> 00:51:36,800

ah i've got all these papers about

1357

00:51:40,950 --> 00:51:39,520

remote viewing oh i was there for that

1358

00:51:43,910 --> 00:51:40,960

you were there you were there for that

1359

00:51:47,270 --> 00:51:43,920

right where was that

1360

00:51:50,950 --> 00:51:47,280

really and i said well that's great

1361

00:51:52,950 --> 00:51:50,960

but you expect us to consider that as as

1362

00:51:55,270 --> 00:51:52,960

evidence where we would have to go

1363

00:51:57,990 --> 00:51:55,280

through every reference and double check

1364

00:51:59,750 --> 00:51:58,000

it and check the the

1365

00:52:00,470 --> 00:51:59,760

the conditions and et cetera et cetera i

1366

00:52:02,069 --> 00:52:00,480

said

1367

00:52:04,069 --> 00:52:02,079

look if you know someone who can do it

1368

00:52:06,470 --> 00:52:04,079

just bring them along and let them do it

1369

00:52:07,510 --> 00:52:06,480

now now this is like randy he says

1370

00:52:11,589 --> 00:52:07,520

don't

1371

00:52:13,750 --> 00:52:11,599

millions of papers about this just do it

1372

00:52:15,030 --> 00:52:13,760

just yeah it's quite right and the gift

1373

00:52:17,030 --> 00:52:15,040

gallop originally comes from a guy

1374

00:52:19,430 --> 00:52:17,040

called dwayne gish

1375

00:52:21,109 --> 00:52:19,440

uh let me see the institute for creation

1376

00:52:22,870 --> 00:52:21,119

research is that right

1377

00:52:24,790 --> 00:52:22,880

he's one of one of these creationist

1378

00:52:26,710 --> 00:52:24,800

things and he's famous in debates for

1379

00:52:28,710 --> 00:52:26,720

just reeling off

1380

00:52:30,390 --> 00:52:28,720

in a very practiced manner a whole

1381

00:52:33,030 --> 00:52:30,400

string of

1382

00:52:35,109 --> 00:52:33,040

[h__\h] frankly the uh the

1383

00:52:37,030 --> 00:52:35,119

representative for the brower

1384

00:52:38,710 --> 00:52:37,040

homeopathic company in south australia

1385

00:52:41,030 --> 00:52:38,720

one robert medhurst

1386

00:52:42,870 --> 00:52:41,040

is famous for that yeah and and so is

1387

00:52:45,670 --> 00:52:42,880

meryl dory i mean we witnessed that we

1388

00:52:47,510 --> 00:52:45,680

went to a debate at channel 7 where she

1389

00:52:49,670 --> 00:52:47,520

gesh galloped and held up papers saying

1390

00:52:51,829 --> 00:52:49,680

look it shows here that vaccines cause

1391

00:52:53,670 --> 00:52:51,839

autism it shows here that the american

1392

00:52:55,270 --> 00:52:53,680

government is paying parents who have

1393

00:52:56,790 --> 00:52:55,280

autistic kids because of mmr and

1394

00:52:59,109 --> 00:52:56,800

wakefield's been doing that lately

1395

00:53:00,549 --> 00:52:59,119

wakefield did it as well and i talked

1396

00:53:02,790 --> 00:53:00,559

about that a couple of weeks ago on the

1397

00:53:05,589 --> 00:53:02,800

zone or maybe last week where

1398

00:53:07,109 --> 00:53:05,599

he went on the today show in america and

1399

00:53:09,430 --> 00:53:07,119

said to matt lauer

1400

00:53:10,710 --> 00:53:09,440

my my study's been reproduced five times

1401
00:53:12,390 --> 00:53:10,720
in five different countries blah blah

1402
00:53:14,069 --> 00:53:12,400
blah blah blah and

1403
00:53:14,950 --> 00:53:14,079
there's no way that you can counteract

1404
00:53:22,790 --> 00:53:14,960
that

1405
00:53:23,670 --> 00:53:22,800
is kind of a the same thing but

1406
00:53:25,910 --> 00:53:23,680
i mean

1407
00:53:27,750 --> 00:53:25,920
really the point that michael brooks is

1408
00:53:28,790 --> 00:53:27,760
making in this article

1409
00:53:30,870 --> 00:53:28,800
and i have to thank him because he

1410
00:53:33,910 --> 00:53:30,880
linked to my blog thank you and i had a

1411
00:53:35,710 --> 00:53:33,920
huge amount of hits three days

1412
00:53:37,910 --> 00:53:35,720
what's your blog again

1413
00:53:39,270 --> 00:53:37,920

skepticsbook.com yes

1414

00:53:40,950 --> 00:53:39,280

um but

1415

00:53:42,950 --> 00:53:40,960

yeah i mean there's no way for people to

1416

00:53:45,670 --> 00:53:42,960

know if it's not

1417

00:53:48,549 --> 00:53:45,680

uh you know a valid scientific method

1418

00:53:50,390 --> 00:53:48,559

valid science unless they look at it but

1419

00:53:52,390 --> 00:53:50,400

i take your point richard and that is

1420

00:53:53,990 --> 00:53:52,400

that it can't just be one paper i mean

1421

00:53:55,349 --> 00:53:54,000

for people that don't

1422

00:53:56,870 --> 00:53:55,359

work in science or don't understand the

1423

00:53:58,390 --> 00:53:56,880

scientific method

1424

00:54:00,390 --> 00:53:58,400

you need a body of research to

1425

00:54:01,750 --> 00:54:00,400

demonstrate an effect before you can say

1426
00:54:03,430 --> 00:54:01,760
it's real

1427
00:54:05,990 --> 00:54:03,440
so one paper

1428
00:54:07,750 --> 00:54:06,000
from the md anderson center in

1429
00:54:11,430 --> 00:54:07,760
tennessee

1430
00:54:13,190 --> 00:54:11,440
is not evidence that homeopathy can cure

1431
00:54:14,150 --> 00:54:13,200
breast cancer whilst not damaging other

1432
00:54:16,790 --> 00:54:14,160
cells

1433
00:54:18,069 --> 00:54:16,800
now for those of us

1434
00:54:19,990 --> 00:54:18,079
who have had

1435
00:54:22,549 --> 00:54:20,000
very personal experience of breast

1436
00:54:25,109 --> 00:54:22,559
cancer my mother 20 years ago had breast

1437
00:54:26,390 --> 00:54:25,119
cancer and it was um successfully

1438
00:54:28,630 --> 00:54:26,400

treated by

1439

00:54:31,270 --> 00:54:28,640

the evils of conventional scientific

1440

00:54:34,150 --> 00:54:31,280

medicine allopathy allopathy

1441

00:54:35,829 --> 00:54:34,160

it it really hits home and i'm sure many

1442

00:54:37,910 --> 00:54:35,839

of our listeners listening right now in

1443

00:54:38,950 --> 00:54:37,920

their cars or jogging or whatever you're

1444

00:54:41,349 --> 00:54:38,960

doing

1445

00:54:42,710 --> 00:54:41,359

maybe cleaning colonoscopies painting

1446

00:54:45,349 --> 00:54:42,720

painting yes

1447

00:54:47,430 --> 00:54:45,359

a lot of people paint to do artwork

1448

00:54:49,349 --> 00:54:47,440

we'll realize this would be it breast

1449

00:54:53,750 --> 00:54:49,359

cancer or other forms of cancer which

1450

00:54:55,510 --> 00:54:53,760

have been treated but or maybe sadly not

1451

00:54:57,910 --> 00:54:55,520

um know the

1452

00:54:59,030 --> 00:54:57,920

the personal impact this has well you

1453

00:55:00,390 --> 00:54:59,040

know it's even more interesting than

1454

00:55:02,470 --> 00:55:00,400

that richard because i blogged about

1455

00:55:03,670 --> 00:55:02,480

this maybe two three months ago i can't

1456

00:55:05,829 --> 00:55:03,680

remember

1457

00:55:08,390 --> 00:55:05,839

and probably a month ago i had a comment

1458

00:55:10,069 --> 00:55:08,400

left on this particular blog by someone

1459

00:55:11,829 --> 00:55:10,079

who said they worked on this particular

1460

00:55:13,510 --> 00:55:11,839

paper

1461

00:55:15,190 --> 00:55:13,520

they then requested when they saw the

1462

00:55:17,990 --> 00:55:15,200

manuscript that their name was taken off

1463

00:55:19,670 --> 00:55:18,000

the paper oh that comments on my blog so

1464

00:55:21,829 --> 00:55:19,680

if you want to go and have a look and

1465

00:55:25,430 --> 00:55:21,839

comment go to skepticsbook.com and look

1466

00:55:27,910 --> 00:55:25,440

for the paper about breast cancer

1467

00:55:29,430 --> 00:55:27,920

and she said that she did analyses that

1468

00:55:31,750 --> 00:55:29,440

the authors didn't like because they

1469

00:55:34,309 --> 00:55:31,760

didn't suit their conclusions and so she

1470

00:55:36,549 --> 00:55:34,319

said i don't want to be a part of this

1471

00:55:39,109 --> 00:55:36,559

and i know some people on twitter

1472

00:55:40,950 --> 00:55:39,119

one is at medtech who's written to the

1473

00:55:42,710 --> 00:55:40,960

md anderson cancer center and

1474

00:55:44,230 --> 00:55:42,720

specifically said to them

1475

00:55:45,109 --> 00:55:44,240

what are you doing putting your name to

1476

00:55:47,510 --> 00:55:45,119

this

1477

00:55:49,430 --> 00:55:47,520

because the problem is now

1478

00:55:51,829 --> 00:55:49,440

it's being tabled in parliament as valid

1479

00:55:54,309 --> 00:55:51,839

evidence and it's completely flawed

1480

00:55:56,630 --> 00:55:54,319

completely flawed absolutely and i took

1481

00:55:58,390 --> 00:55:56,640

it to pieces and so did david gorski

1482

00:56:00,069 --> 00:55:58,400

and it should not be in the peer review

1483

00:56:00,950 --> 00:56:00,079

it should be retracted

1484

00:56:02,710 --> 00:56:00,960

i mean

1485

00:56:04,870 --> 00:56:02,720

michael brooks says in here we didn't

1486

00:56:06,710 --> 00:56:04,880

need andrew wakefield to show that the

1487

00:56:08,549 --> 00:56:06,720

way things currently run peer review is

1488

00:56:10,710 --> 00:56:08,559

a hugely flawed system

1489

00:56:12,789 --> 00:56:10,720

and it is it is yes you've commented

1490

00:56:14,710 --> 00:56:12,799

you've made that comment to me before

1491

00:56:16,630 --> 00:56:14,720

from personal experience yeah like two

1492

00:56:18,870 --> 00:56:16,640

days ago

1493

00:56:20,309 --> 00:56:18,880

when my paper got knocked back again i

1494

00:56:21,430 --> 00:56:20,319

can't help thinking of the words of carl

1495

00:56:24,549 --> 00:56:21,440

sagan

1496

00:56:27,190 --> 00:56:24,559

um the method of science is tried and

1497

00:56:28,230 --> 00:56:27,200

true it's not perfect but it's the best

1498

00:56:29,670 --> 00:56:28,240

we have

1499

00:56:31,349 --> 00:56:29,680

it's not perfect of course it's not

1500

00:56:33,910 --> 00:56:31,359

perfect well you know it's run by humans

1501
00:56:35,109 --> 00:56:33,920
and when we are not perfect creatures no

1502
00:56:37,270 --> 00:56:35,119
um but

1503
00:56:38,789 --> 00:56:37,280
interestingly on this um so that's been

1504
00:56:39,589 --> 00:56:38,799
tabled in parliament

1505
00:56:43,829 --> 00:56:39,599
as

1506
00:56:46,150 --> 00:56:43,839
cancer can be cured by the homeopathy

1507
00:56:47,990 --> 00:56:46,160
okay let me quote from this article

1508
00:56:49,510 --> 00:56:48,000
this study was mentioned in parliament

1509
00:56:51,349 --> 00:56:49,520
and the statement that homeopathy can

1510
00:56:53,750 --> 00:56:51,359
kill cancer cells is now a matter of

1511
00:56:55,910 --> 00:56:53,760
public record in a spectacular failure

1512
00:56:58,309 --> 00:56:55,920
ah interestingly right

1513
00:57:00,309 --> 00:56:58,319

because there is actually an active act

1514

00:57:02,069 --> 00:57:00,319

of parliament i guess

1515

00:57:05,750 --> 00:57:02,079

i could be slightly wrong in the details

1516

00:57:06,630 --> 00:57:05,760

but the 1941 cancer act in the uk

1517

00:57:09,030 --> 00:57:06,640

um

1518

00:57:11,030 --> 00:57:09,040

mandates the ways you can claim to cure

1519

00:57:12,390 --> 00:57:11,040

cancer and a lot of cracks have been

1520

00:57:13,670 --> 00:57:12,400

prosecuted underneath that and i'm

1521

00:57:16,069 --> 00:57:13,680

wondering if this has been made under

1522

00:57:17,750 --> 00:57:16,079

parliamentary privilege privilege well

1523

00:57:19,190 --> 00:57:17,760

no actually

1524

00:57:21,829 --> 00:57:19,200

actually that's not the case jason

1525

00:57:24,470 --> 00:57:21,839

because the paper doesn't claim that ah

1526
00:57:27,190 --> 00:57:24,480
but everyone else's interpretation on it

1527
00:57:30,309 --> 00:57:28,630
i mean i'm not saying that you can be

1528
00:57:32,230 --> 00:57:30,319
prosecuted unless it's just interesting

1529
00:57:34,710 --> 00:57:32,240
that i don't know i haven't it's in the

1530
00:57:36,470 --> 00:57:34,720
uk on this i haven't heard what he said

1531
00:57:37,670 --> 00:57:36,480
particularly but all i can tell you is

1532
00:57:40,309 --> 00:57:37,680
that it says in this article from

1533
00:57:42,390 --> 00:57:40,319
michael brooks that he did say in

1534
00:57:43,990 --> 00:57:42,400
parliament homeopathy can kill cancer

1535
00:57:45,589 --> 00:57:44,000
cells

1536
00:57:47,670 --> 00:57:45,599
in defense of the evidence check that

1537
00:57:50,630 --> 00:57:47,680
happened a few months ago listeners

1538
00:57:53,270 --> 00:57:50,640

might at this stage want to run to their

1539

00:57:54,950 --> 00:57:53,280

computers and google james randy bbc

1540

00:57:57,270 --> 00:57:54,960

homeopathy

1541

00:57:59,910 --> 00:57:57,280

and see the video of where james randy

1542

00:58:01,030 --> 00:57:59,920

ran uh oh must have been almost 10 years

1543

00:58:03,510 --> 00:58:01,040

ago now

1544

00:58:04,549 --> 00:58:03,520

eight years ago whatever the case may be

1545

00:58:07,109 --> 00:58:04,559

did a

1546

00:58:10,069 --> 00:58:07,119

special for the bbc where he fairly

1547

00:58:12,630 --> 00:58:10,079

tested the claims of homeopathy and

1548

00:58:13,829 --> 00:58:12,640

guess what it was shown to be very

1549

00:58:15,829 --> 00:58:13,839

wanting

1550

00:58:17,910 --> 00:58:15,839

well it's interesting that you mentioned

1551

00:58:20,230 --> 00:58:17,920

that jason because the homeopath

1552

00:58:22,470 --> 00:58:20,240

involved in this case in perth uh

1553

00:58:25,990 --> 00:58:22,480

francine scream

1554

00:58:27,750 --> 00:58:26,000

uh it's illegal in new south wales to

1555

00:58:31,190 --> 00:58:27,760

claim to be able to treat untreatable

1556

00:58:33,030 --> 00:58:31,200

diseases with alternative medicine

1557

00:58:35,109 --> 00:58:33,040

so there's a potential that she may be

1558

00:58:38,630 --> 00:58:35,119

prosecuted in this case i don't know i'm

1559

00:58:41,030 --> 00:58:38,640

not a lawyer but she did tell this lady

1560

00:58:42,950 --> 00:58:41,040

uh you know mrs dingle not to take any

1561

00:58:44,390 --> 00:58:42,960

other medicine and that she could cure

1562

00:58:48,789 --> 00:58:44,400

her

1563

00:58:51,750 --> 00:58:48,799

not to well this is the sort of thing

1564

00:58:53,349 --> 00:58:51,760

that will come out in the inquest and

1565

00:58:55,190 --> 00:58:53,359

you know just to reiterate none of us

1566

00:58:57,190 --> 00:58:55,200

around the table are actually lawyers

1567

00:58:59,190 --> 00:58:57,200

so we can't comment and we certainly

1568

00:59:01,349 --> 00:58:59,200

don't know the full facts of the the

1569

00:59:03,190 --> 00:59:01,359

situation and um

1570

00:59:05,589 --> 00:59:03,200

we'll leave it at that because we'll

1571

00:59:07,829 --> 00:59:05,599

leave that up to our justice system and

1572

00:59:09,270 --> 00:59:07,839

see what happens but i just want to say

1573

00:59:11,349 --> 00:59:09,280

in closing that

1574

00:59:12,870 --> 00:59:11,359

i mean this is the case where the family

1575

00:59:13,990 --> 00:59:12,880

went to the coroner and said we want an

1576

00:59:16,150 --> 00:59:14,000

inquest

1577

00:59:18,390 --> 00:59:16,160

how many cases of this happens and

1578

00:59:19,829 --> 00:59:18,400

nobody bothers you know and i had a

1579

00:59:21,910 --> 00:59:19,839

journalist call me

1580

00:59:23,430 --> 00:59:21,920

about a year ago and say i'm trying to

1581

00:59:25,270 --> 00:59:23,440

find someone who's been damaged by

1582

00:59:26,870 --> 00:59:25,280

chiropractic when simon singh was coming

1583

00:59:27,990 --> 00:59:26,880

to australia and we were hosting his

1584

00:59:29,589 --> 00:59:28,000

talk

1585

00:59:30,950 --> 00:59:29,599

and i called a few people and they said

1586

00:59:33,109 --> 00:59:30,960

to me well they're either dead or

1587

00:59:35,030 --> 00:59:33,119

they're too embarrassed to talk about it

1588

00:59:36,789 --> 00:59:35,040

it's a it's an excellent point raging

1589

00:59:38,230 --> 00:59:36,799

one i haven't really thought through

1590

00:59:40,309 --> 00:59:38,240

actually

1591

00:59:43,510 --> 00:59:40,319

there must be thousands of cases of

1592

00:59:45,190 --> 00:59:43,520

damage or ill health or death

1593

00:59:47,030 --> 00:59:45,200

due to people

1594

00:59:49,990 --> 00:59:47,040

ignoring real medicine and turning to

1595

00:59:50,710 --> 00:59:50,000

quackery which simply are not reported

1596

00:59:52,630 --> 00:59:50,720

yeah

1597

00:59:53,589 --> 00:59:52,640

i mean i know people that have gone

1598

00:59:55,990 --> 00:59:53,599

through that

1599

00:59:58,390 --> 00:59:56,000

and it's not so much that they

1600

01:00:01,270 --> 00:59:58,400

died because of alternative medicine

1601

01:00:03,190 --> 01:00:01,280

it's because they

1602

01:00:05,670 --> 01:00:03,200

waited too long well no not just that

1603

01:00:07,190 --> 01:00:05,680

they had faith in it when

1604

01:00:09,190 --> 01:00:07,200

they knew they were going to die anyway

1605

01:00:10,950 --> 01:00:09,200

i mean if they have terminal illnesses

1606

01:00:14,789 --> 01:00:10,960

yeah

1607

01:00:14,799 --> 01:00:18,069

it's atmospheric

1608

01:00:18,079 --> 01:00:22,069

yes another plane

1609

01:00:25,829 --> 01:00:24,150

it's not sound effects folks rachel

1610

01:00:27,190 --> 01:00:25,839

really does live under the flight path

1611

01:00:28,950 --> 01:00:27,200

instead of um

1612

01:00:31,670 --> 01:00:28,960

courtesy bus announcements tonight we

1613

01:00:35,430 --> 01:00:33,829

but the thing that really

1614

01:00:36,950 --> 01:00:35,440

keeps me going and doing this stuff

1615

01:00:39,829 --> 01:00:36,960

richard is people that actually get

1616

01:00:41,510 --> 01:00:39,839

scammed by these things and

1617

01:00:43,190 --> 01:00:41,520

you know there's a there's a point where

1618

01:00:44,789 --> 01:00:43,200

you are so desperate and you are you

1619

01:00:47,190 --> 01:00:44,799

know you're going to die

1620

01:00:48,309 --> 01:00:47,200

that you do get sucked in by these

1621

01:00:50,309 --> 01:00:48,319

things and there has to be more

1622

01:00:52,390 --> 01:00:50,319

legislation to to stop this from

1623

01:00:56,549 --> 01:00:52,400

happening and i have not been in that

1624

01:00:58,630 --> 01:00:56,559

situation nor have you or jason or well

1625

01:01:02,150 --> 01:00:58,640

most people i know

1626

01:01:04,150 --> 01:01:02,160

uh randy was once it was on put to him

1627

01:01:05,910 --> 01:01:04,160

james randy was once put to him by

1628

01:01:07,829 --> 01:01:05,920

somebody in an audience

1629

01:01:09,750 --> 01:01:07,839

what if you were terminally ill would

1630

01:01:12,230 --> 01:01:09,760

you turn to some sort of alternative

1631

01:01:14,309 --> 01:01:12,240

stuff you know try something he said no

1632

01:01:16,069 --> 01:01:14,319

absolutely not i wouldn't waste my time

1633

01:01:17,990 --> 01:01:16,079

and money well you know what i couldn't

1634

01:01:19,349 --> 01:01:18,000

actually say i might

1635

01:01:21,270 --> 01:01:19,359

possibly

1636

01:01:24,150 --> 01:01:21,280

succumb to that i don't know yeah i

1637

01:01:26,789 --> 01:01:24,160

agree that's one of the things i say

1638

01:01:28,789 --> 01:01:26,799

i debate with christians and theists

1639

01:01:30,390 --> 01:01:28,799

quite a lot online and they say you wait

1640

01:01:31,589 --> 01:01:30,400

till you're on your deathbed and you'll

1641

01:01:33,750 --> 01:01:31,599

turn

1642

01:01:36,069 --> 01:01:33,760

and i just have to say well yeah maybe i

1643

01:01:37,190 --> 01:01:36,079

will maybe i'll be a little bit crazy in

1644

01:01:39,670 --> 01:01:37,200

the head

1645

01:01:42,069 --> 01:01:39,680

how do i know if i'm about to die it's

1646

01:01:43,670 --> 01:01:42,079

it's a very good point we don't know we

1647

01:01:46,549 --> 01:01:43,680

would all hope that we would have the

1648

01:01:48,390 --> 01:01:46,559

presence of mind and the

1649

01:01:50,470 --> 01:01:48,400

logic and the intellect and all the rest

1650

01:01:52,230 --> 01:01:50,480

of it too well carry on one of the

1651
01:01:54,710 --> 01:01:52,240
things that's come out of this and prior

1652
01:01:56,150 --> 01:01:54,720
to this also in response to the evidence

1653
01:01:57,670 --> 01:01:56,160
check in the uk

1654
01:01:59,670 --> 01:01:57,680
is that there is some movement now in

1655
01:02:02,150 --> 01:01:59,680
australia to change laws

1656
01:02:03,349 --> 01:02:02,160
and in this particular case with mrs

1657
01:02:05,589 --> 01:02:03,359
dingle

1658
01:02:07,589 --> 01:02:05,599
the coroner has said that he may

1659
01:02:09,510 --> 01:02:07,599
start making new laws that this stuff

1660
01:02:11,750 --> 01:02:09,520
can't happen so

1661
01:02:13,670 --> 01:02:11,760
it took a tragedy for that to happen

1662
01:02:15,109 --> 01:02:13,680
but let's hope that something will

1663
01:02:18,549 --> 01:02:15,119

change in australia in terms of

1664

01:02:20,470 --> 01:02:18,559

homeopathy and ken harvey dr ken harvey

1665

01:02:22,150 --> 01:02:20,480

has been absolutely vocal about this for

1666

01:02:24,069 --> 01:02:22,160

a number of years and i hope that we can

1667

01:02:25,990 --> 01:02:24,079

get some changes soon

1668

01:02:27,589 --> 01:02:26,000

you know what i'm optimistic i think we

1669

01:02:29,030 --> 01:02:27,599

will i think there are enough people

1670

01:02:32,309 --> 01:02:29,040

like um

1671

01:02:34,710 --> 01:02:32,319

like our friends and and um

1672

01:02:36,870 --> 01:02:34,720

loretta loretta the jellybean lady of

1673

01:02:38,230 --> 01:02:36,880

course who are fighting very hard about

1674

01:02:39,430 --> 01:02:38,240

this sort of thing

1675

01:02:41,910 --> 01:02:39,440

that yes

1676

01:02:43,030 --> 01:02:41,920

we have every reason to be optimistic

1677

01:02:45,349 --> 01:02:43,040

but

1678

01:02:47,670 --> 01:02:45,359

on that upbeat note on that opportunity

1679

01:02:50,069 --> 01:02:47,680

let's be optimistic since our pizzas

1680

01:02:52,870 --> 01:02:50,079

have arrived delicious i couldn't help

1681

01:02:55,109 --> 01:02:52,880

but notice they've come through the door

1682

01:02:57,270 --> 01:02:55,119

i'd like to thank jason thank you jason

1683

01:02:58,789 --> 01:02:57,280

thank you richard lovely to see you dr

1684

01:03:01,109 --> 01:02:58,799

hd thank you for letting us use your

1685

01:03:02,390 --> 01:03:01,119

front room you're welcome sorry for the

1686

01:03:04,710 --> 01:03:02,400

plane noises

1687

01:03:06,309 --> 01:03:04,720

no it's part of the charm and a very

1688

01:03:07,910 --> 01:03:06,319

special thank you to our listeners out

1689

01:03:10,069 --> 01:03:07,920

there who um

1690

01:03:11,829 --> 01:03:10,079

i i hope enjoy the show

1691

01:03:14,309 --> 01:03:11,839

and and a lot of you

1692

01:03:16,549 --> 01:03:14,319

i'm very pleased to say contribute by

1693

01:03:19,349 --> 01:03:16,559

donations which is very kind of you and

1694

01:03:20,630 --> 01:03:19,359

very much appreciated and listeners who

1695

01:03:23,510 --> 01:03:20,640

subscribe

1696

01:03:24,870 --> 01:03:23,520

less than a dollar an episode but and

1697

01:03:27,750 --> 01:03:24,880

those listeners

1698

01:03:28,630 --> 01:03:27,760

believe me your money is very well spent

1699

01:03:34,390 --> 01:03:28,640

we

1700

01:03:38,789 --> 01:03:36,710

and big wine apparently big wine and big

1701
01:03:42,470 --> 01:03:38,799
karma but no

1702
01:03:45,029 --> 01:03:42,480
no seriously that is big wine

1703
01:03:46,870 --> 01:03:45,039
it's a new one

1704
01:03:48,309 --> 01:03:46,880
um i like big wine

1705
01:03:50,549 --> 01:03:48,319
the bigger the better

1706
01:03:52,150 --> 01:03:50,559
your contributing

1707
01:03:54,390 --> 01:03:52,160
oh dude it's time for pizza your

1708
01:03:57,190 --> 01:03:54,400
contributions really do help keep this

1709
01:03:59,430 --> 01:03:57,200
show going and it's a symbol of your

1710
01:04:01,430 --> 01:03:59,440
support and your

1711
01:04:03,029 --> 01:04:01,440
appreciation of what we're doing week

1712
01:04:05,190 --> 01:04:03,039
after week after week

1713
01:04:07,589 --> 01:04:05,200

believe me we love it

1714

01:04:09,670 --> 01:04:07,599

uh i can't imagine not doing the show

1715

01:04:11,910 --> 01:04:09,680

because it means so much to me and to

1716

01:04:13,670 --> 01:04:11,920

you i think dr h

1717

01:04:16,470 --> 01:04:13,680

and to our listeners so thank you very

1718

01:04:18,470 --> 01:04:16,480

much if you are so moved

1719

01:04:20,630 --> 01:04:18,480

um by the show and you think we're doing

1720

01:04:21,750 --> 01:04:20,640

a good job please visit our website and

1721

01:04:23,510 --> 01:04:21,760

um

1722

01:04:25,029 --> 01:04:23,520

think about clicking on the subscription

1723

01:04:27,589 --> 01:04:25,039

list

1724

01:04:30,309 --> 01:04:27,599

less than a dollar a week

1725

01:04:32,950 --> 01:04:30,319

less than a cup of coffee as we say

1726

01:04:35,109 --> 01:04:32,960

do we we do well then yeah it's a lot

1727

01:04:37,510 --> 01:04:35,119

less than a cup but there's a lot less

1728

01:04:39,670 --> 01:04:37,520

these days but dr rachie and jason thank

1729

01:05:38,549 --> 01:04:39,680

you and cheers cheers

1730

01:05:42,069 --> 01:05:40,069

thank you for listening to the skeptic

1731

01:05:44,549 --> 01:05:42,079

zone and thank you to all those people

1732

01:05:46,630 --> 01:05:44,559

who turned up to watch our very own dr

1733

01:05:48,870 --> 01:05:46,640

chrissy wilson give her talk at london

1734

01:05:50,789 --> 01:05:48,880

skeptics in the pub by all accounts a

1735

01:05:53,190 --> 01:05:50,799

great evening we look forward to some

1736

01:05:55,109 --> 01:05:53,200

reports from dr chrissy very soon

1737

01:05:57,349 --> 01:05:55,119

so please join us again next week for

1738

01:05:59,670 --> 01:05:57,359

the next episode of the skeptic zone

1739

01:06:01,190 --> 01:05:59,680

until then this is richard saunders

1740

01:06:03,510 --> 01:06:01,200

signing off and looking forward to

1741

01:06:07,910 --> 01:06:03,520

seeing you all at town las vegas from

1742

01:06:11,589 --> 01:06:09,589

you've been listening to the skeptic

1743

01:06:14,950 --> 01:06:11,599

zone visit our website at