

**THE  
SKEPTIC  
ZONE  
PODCAST**

**[www.skepticzone.tv](http://www.skepticzone.tv)**

1  
00:00:22,320 --> 00:00:09,089  
welcome to the skeptic zone the podcast

2  
00:00:29,710 --> 00:00:25,480  
yes it's a skeptic zone podcast episode

3  
00:00:31,210 --> 00:00:29,720  
number 423 for the 27th of November 2016

4  
00:00:34,210 --> 00:00:31,220  
Richard Saunders here with you from

5  
00:00:37,420 --> 00:00:34,220  
Sydney Australia I'm have a look out the

6  
00:00:39,640 --> 00:00:37,430  
window overcast overcast maybe a bit of

7  
00:00:41,350 --> 00:00:39,650  
rain get the washing in looking at that

8  
00:00:42,820 --> 00:00:41,360  
weather what's coming up on the show

9  
00:00:45,760 --> 00:00:42,830  
this week we're going to kick off with a

10  
00:00:48,910 --> 00:00:45,770  
grain of salt from a ron cey give part

11  
00:00:51,520 --> 00:00:48,920  
of his continuing reports my goodness me

12  
00:00:54,579 --> 00:00:51,530  
he was busy from QED double Lance ago

13  
00:00:58,270 --> 00:00:54,589

now in Manchester this week Iran chats

14

00:01:01,360 --> 00:00:58,280

two miles power a youtuber who fights

15

00:01:04,390 --> 00:01:01,370

misinformation on GMOs black selves

16

00:01:07,770 --> 00:01:04,400

that's nasty stuff and many other things

17

00:01:11,230 --> 00:01:07,780

but I quite like miles he points out

18

00:01:14,290 --> 00:01:11,240

various problems with magical thinking

19

00:01:16,960 --> 00:01:14,300

in quackery really that black salvas

20

00:01:18,490 --> 00:01:16,970

awful stuff an interesting interview I'm

21

00:01:20,710 --> 00:01:18,500

sure you'll find coming up at the top of

22

00:01:24,880 --> 00:01:20,720

the show and don't forget you can find

23

00:01:26,980 --> 00:01:24,890

links to two miles videos and online

24

00:01:30,039 --> 00:01:26,990

activities on the show notes this week

25

00:01:33,039 --> 00:01:30,049

after that brouhaha from Australia's

26

00:01:34,569 --> 00:01:33,049

science channel a new series we're

27

00:01:36,219 --> 00:01:34,579

trying out on the zone it's working

28

00:01:38,350 --> 00:01:36,229

quite well very short snippets of

29

00:01:42,249 --> 00:01:38,360

information this week ten Yemaya looks

30

00:01:44,709 --> 00:01:42,259

at large telescopes in China would you

31

00:01:47,080 --> 00:01:44,719

like to go and visit then it's Maynard

32

00:01:49,389 --> 00:01:47,090

spooky action now for some crazy reason

33

00:01:51,490 --> 00:01:49,399

Maynard how reporter main had ended up

34

00:01:55,149 --> 00:01:51,500

with a ticket to go and see dr. Lisa

35

00:01:57,069 --> 00:01:55,159

Randall here in Australia luckily for me

36

00:02:00,330 --> 00:01:57,079

I was there too what a night it was

37

00:02:04,029 --> 00:02:00,340

fascinating what I want an interesting

38

00:02:07,810 --> 00:02:04,039

series of topics and issues were brought

39

00:02:10,330 --> 00:02:07,820

up everything from dinosaurs to the

40

00:02:12,160 --> 00:02:10,340

speed of light fascinating stuff a

41

00:02:14,080 --> 00:02:12,170

report on the evening from may not

42

00:02:17,290 --> 00:02:14,090

including a short interview of dr. Lisa

43

00:02:18,670 --> 00:02:17,300

Randall herself cigna Dina even Bryce

44

00:02:20,440 --> 00:02:18,680

from Australian skeptics and a

45

00:02:22,720 --> 00:02:20,450

smattering of other people to give their

46

00:02:25,150 --> 00:02:22,730

thoughts and impressions on the evening

47

00:02:27,850 --> 00:02:25,160

itself and thank you once again to think

48

00:02:29,680 --> 00:02:27,860

inc after that another blast from the

49

00:02:33,190 --> 00:02:29,690

past and our continuing look at the

50

00:02:35,230 --> 00:02:33,200

mind-body wallet festival over the years

51

00:02:38,770 --> 00:02:35,240

this time we pick a

52

00:02:40,480 --> 00:02:38,780

report from 1998 from dr. Trevor case

53

00:02:42,910 --> 00:02:40,490

who visited the main body wallet here in

54

00:02:45,880 --> 00:02:42,920

Sydney we have some committee members at

55

00:02:47,470 --> 00:02:45,890

the time I can't help that thinking one

56

00:02:50,650 --> 00:02:47,480

day would be nice to have the whole mind

57

00:02:52,570 --> 00:02:50,660

bodies I nearly said spirit by accident

58

00:02:54,580 --> 00:02:52,580

mind-body wallet festival raided by the

59

00:02:58,050 --> 00:02:54,590

federal authorities or the health

60

00:03:00,550 --> 00:02:58,060

authorities or the Boy Scouts or anybody

61

00:03:03,430 --> 00:03:00,560

could this mean what goes on there and

62

00:03:04,900 --> 00:03:03,440

then to round off the show news from the

63

00:03:06,550 --> 00:03:04,910

## Australian skeptics National Convention

64

00:03:09,550 --> 00:03:06,560

they had their national convention in

65

00:03:12,940 --> 00:03:09,560

Melbourne factor it's still going on as

66

00:03:15,490 --> 00:03:12,950

I speak day two I think Ed's at Ernst is

67

00:03:18,640 --> 00:03:15,500

up there speaking right now and I know

68

00:03:21,820 --> 00:03:18,650

I'll report a Heidi Robertson will be on

69

00:03:24,370 --> 00:03:21,830

a panel later on and goodness me our

70

00:03:26,920 --> 00:03:24,380

dear reporter Joe alabaster gave a talk

71

00:03:29,020 --> 00:03:26,930

there yesterday are so proud to see

72

00:03:31,870 --> 00:03:29,030

photographs and see that she was giving

73

00:03:34,630 --> 00:03:31,880

a report good on you Joe great work and

74

00:03:38,890 --> 00:03:34,640

looking forward to having evidence

75

00:03:41,140 --> 00:03:38,900

please back on the skeptic zone in due

76

00:03:43,420 --> 00:03:41,150

course anyway from the National

77

00:03:47,080 --> 00:03:43,430

Convention we're going to find out the

78

00:03:50,770 --> 00:03:47,090

winner of this year's bent spoon award

79

00:03:52,960 --> 00:03:50,780

oh the award nobody wants to win also

80

00:03:56,080 --> 00:03:52,970

winners of skeptic of the year life

81

00:03:59,890 --> 00:03:56,090

memberships and the Fred thorne at award

82

00:04:01,930 --> 00:03:59,900

who's going to win who has won if you

83

00:04:05,860 --> 00:04:01,940

don't know find out at the end of the

84

00:04:07,750 --> 00:04:05,870

show don't forget people in Sydney who I

85

00:04:10,240 --> 00:04:07,760

couldn't make it to the convention you

86

00:04:12,340 --> 00:04:10,250

can see Michael Marshall this Tuesday

87

00:04:17,950 --> 00:04:12,350

night add a special skeptics in the pub

88

00:04:21,460 --> 00:04:17,960

head to meetup com /a ust skeptics aust

89

00:04:24,490 --> 00:04:21,470

skeptics for more information and better

90

00:04:26,320 --> 00:04:24,500

book quickly that's guaranteed to be a

91

00:04:28,510 --> 00:04:26,330

really big night I think we'll get a lot

92

00:04:30,850 --> 00:04:28,520

of people coming to that this tuesday

93

00:04:32,560 --> 00:04:30,860

the 29th of november sydney people

94

00:04:33,880 --> 00:04:32,570

please come along and join me and

95

00:04:37,030 --> 00:04:33,890

Michael Marshall and all sorts of other

96

00:04:39,100 --> 00:04:37,040

people and who knows you may even end up

97

00:04:41,080 --> 00:04:39,110

being interviewed by may not more

98

00:04:43,860 --> 00:04:41,090

information at the end of the show but

99

00:04:46,510 --> 00:04:43,870

now it's time for me to run downstairs

100

00:04:48,420 --> 00:04:46,520

making sure I don't trip over the cats

101

00:04:50,160 --> 00:04:48,430

who lie in the stairs

102

00:04:52,020 --> 00:04:50,170

so you're walking down the stairs and

103

00:04:55,050 --> 00:04:52,030

you can put your foot down there's a cat

104

00:04:56,640 --> 00:04:55,060

I don't know why they do that they like

105

00:04:58,830 --> 00:04:56,650

the stairs they're nice and carpeted and

106

00:05:01,290 --> 00:04:58,840

comfortable I'm going to carefully

107

00:05:03,930 --> 00:05:01,300

tiptoe down the stairs raid the fridge

108

00:05:09,050 --> 00:05:03,940

for some something I don't have often

109

00:05:12,300 --> 00:05:09,060

which I really love caramel yogurt oh

110

00:05:14,760 --> 00:05:12,310

yeah it's it's not easy to find but it's

111

00:05:32,730 --> 00:05:14,770

really yummy while I do that I hope you

112

00:05:44,649 --> 00:05:35,520

let's all take this with a grain of salt

113

00:05:46,179 --> 00:05:44,659

he's around ticket so miles hello how

114

00:05:48,490 --> 00:05:46,189

are you doing I'm doing more fantasy so

115

00:05:50,290 --> 00:05:48,500

very good it's been a year to the day

116

00:05:51,429 --> 00:05:50,300

only a year to the day so when we first

117

00:05:52,480 --> 00:05:51,439

were introduced all the way down in

118

00:05:54,670 --> 00:05:52,490

Brisbane I mean you can't get much

119

00:05:58,240 --> 00:05:54,680

further about really know you can't know

120

00:06:03,730 --> 00:05:58,250

so i'm here with miles power who's a

121

00:06:05,980 --> 00:06:03,740

youtuber and you spoke yesterday a big

122

00:06:08,050 --> 00:06:05,990

that's kept you can't yeah can you tell

123

00:06:09,760 --> 00:06:08,060

us what you spoke about yes so i was

124

00:06:12,399 --> 00:06:09,770

giving a snippet of a talk that i'm

125

00:06:14,680 --> 00:06:12,409

giving called will GMOs kill us all she

126

00:06:15,939 --> 00:06:14,690

said okay I think it's a great title it

127

00:06:20,619 --> 00:06:15,949

hasn't gone down very well but never

128

00:06:22,149 --> 00:06:20,629

mind and so my talk really is I look at

129

00:06:24,249 --> 00:06:22,159

prominent papers out there the

130

00:06:27,640 --> 00:06:24,259

cornerstones of the anti-gmo movement

131

00:06:29,379 --> 00:06:27,650

the scientists and and the big the big

132

00:06:32,260 --> 00:06:29,389

shooters are basically saying that GMOs

133

00:06:34,869 --> 00:06:32,270

are nasty and I look at these papers and

134

00:06:36,459 --> 00:06:34,879

just using clear English and just saying

135

00:06:39,610 --> 00:06:36,469

hey this is what it actually says show

136

00:06:42,309 --> 00:06:39,620

that actually they're rubbish yet so I

137

00:06:45,610 --> 00:06:42,319

just go through these papers tell people

138

00:06:47,110 --> 00:06:45,620

what they were promoted as saying then

139

00:06:49,540 --> 00:06:47,120

we go through them we see if they've got

140

00:06:51,700 --> 00:06:49,550

any problems with the experiment with

141

00:06:54,369 --> 00:06:51,710

the seralini paper it's a small number

142

00:06:56,200 --> 00:06:54,379

of rats and also the rats that they used

143

00:06:59,079 --> 00:06:56,210

unknown to spontaneously grow tumors

144

00:07:01,839 --> 00:06:59,089

that they said were the result of GMOs

145

00:07:03,459 --> 00:07:01,849

and round up so it's just going through

146

00:07:06,550 --> 00:07:03,469

that and saying that hey these are

147

00:07:09,189 --> 00:07:06,560

rubbish and why is it okay for certain

148

00:07:10,629 --> 00:07:09,199

organizations to push these papers that

149

00:07:13,089 --> 00:07:10,639

are rubbish we wouldn't think it's

150

00:07:15,369 --> 00:07:13,099

acceptable for say a major political

151

00:07:17,260 --> 00:07:15,379

party to say vaccines are rubbish and

152

00:07:18,999 --> 00:07:17,270

Vic sorry vaccines yet vaccines rubbish

153

00:07:20,499 --> 00:07:19,009

look at this andrew wakefield paper we

154

00:07:23,409 --> 00:07:20,509

wouldn't find except what we would say

155

00:07:27,999 --> 00:07:23,419

no shut up but for some reason it's okay

156

00:07:29,589 --> 00:07:28,009

for anti-gm and papers to do that so is

157

00:07:31,389 --> 00:07:29,599

this something so the toga gave

158

00:07:33,760 --> 00:07:31,399

yesterday I think it's not much of a

159

00:07:34,810 --> 00:07:33,770

spoiler for listeners the skin exam is

160

00:07:37,790 --> 00:07:34,820

that the

161

00:07:39,620 --> 00:07:37,800

gmOs are not going to kill us all well

162

00:07:42,200 --> 00:07:39,630

not not not based on the evidence that

163

00:07:44,629 --> 00:07:42,210

we have it yeah the moment well I also

164

00:07:46,070 --> 00:07:44,639

this the voltage genetically modify

165

00:07:47,420 --> 00:07:46,080

something is a tool and not the final

166

00:07:48,800 --> 00:07:47,430

product it is genetically modify

167

00:07:50,150 --> 00:07:48,810

something to produce something terrible

168

00:07:52,460 --> 00:07:50,160

that's going to kill you it's going to

169

00:07:54,980 --> 00:07:52,470

kill you this but anyone who says just

170

00:07:57,320 --> 00:07:54,990

the mere act of genetic modification is

171

00:07:59,409 --> 00:07:57,330

inherently evil causes horrible things

172

00:08:01,730 --> 00:07:59,419

don't know what they're talking about so

173

00:08:03,350 --> 00:08:01,740

that's really what I'm driving home in

174

00:08:05,330 --> 00:08:03,360

the perfect example I gave and one that

175

00:08:06,650 --> 00:08:05,340

gave yesterday was the grapefruit a lot

176

00:08:08,120 --> 00:08:06,660

of people don't know that that grow

177

00:08:10,879 --> 00:08:08,130

through that you can buy pretty much on

178

00:08:12,320 --> 00:08:10,889

any shop in any shop story is a result

179

00:08:14,840 --> 00:08:12,330

of something called atomic gardening

180

00:08:16,820 --> 00:08:14,850

where we take the organism and we

181

00:08:18,590 --> 00:08:16,830

exposed at about 80 years ago to the

182

00:08:21,950 --> 00:08:18,600

high doses of radiation we've caused it

183

00:08:23,810 --> 00:08:21,960

to mutate we literally blitzed parts of

184

00:08:25,340 --> 00:08:23,820

its DNA and we've looked at like

185

00:08:28,370 --> 00:08:25,350

hundreds and thousands of them until we

186

00:08:30,590 --> 00:08:28,380

find one we actually has traits that we

187

00:08:31,760 --> 00:08:30,600

want so it has smaller seeds and it's

188

00:08:33,500 --> 00:08:31,770

kind of a more reddish color and we

189

00:08:35,810 --> 00:08:33,510

taking it and we've done it again and

190

00:08:38,959 --> 00:08:35,820

that in my mind would be a GMO but it's

191

00:08:40,579 --> 00:08:38,969

not classed as one so it gets a thumbs

192

00:08:43,159 --> 00:08:40,589

up from Greenpeace and things I think

193

00:08:45,350 --> 00:08:43,169

it's also the fact that most of the most

194

00:08:47,900 --> 00:08:45,360

of the fruits and vegetables though EE

195

00:08:49,640 --> 00:08:47,910

today are not not nothin like oh no they

196

00:08:51,950 --> 00:08:49,650

were originally and you know they've

197

00:08:53,870 --> 00:08:51,960

been cultivated and again it doesn't

198

00:08:55,400 --> 00:08:53,880

count as GMO but essentially there's

199

00:08:57,710 --> 00:08:55,410

really no difference it's just the tool

200

00:08:59,780 --> 00:08:57,720

is different yeah um sorry i

201  
00:09:01,610 --> 00:08:59,790  
interrupting you know the right yeah it

202  
00:09:03,890 --> 00:09:01,620  
all really comes down to the dictionary

203  
00:09:05,630 --> 00:09:03,900  
definition of what GMO is so it is an

204  
00:09:07,220 --> 00:09:05,640  
organism or microorganisms whose genetic

205  
00:09:08,960 --> 00:09:07,230  
material has been altered this is

206  
00:09:11,960 --> 00:09:08,970  
important bit by means of genetic

207  
00:09:13,280 --> 00:09:11,970  
engineering so by pcr and etc so things

208  
00:09:15,230 --> 00:09:13,290  
like breeding even though you are

209  
00:09:17,480 --> 00:09:15,240  
picking essentially genetic traits that

210  
00:09:21,230 --> 00:09:17,490  
you want is in classed as a GMO

211  
00:09:24,170 --> 00:09:21,240  
hybridizing wouldn't be a GMO atomic

212  
00:09:26,810 --> 00:09:24,180  
gardening using a chemical mutagen to

213  
00:09:29,510 --> 00:09:26,820

create these things isn't a GMO but if

214

00:09:30,829 --> 00:09:29,520

you you know print out their DNA and put

215

00:09:33,199 --> 00:09:30,839

it in somewhere then you know we have

216

00:09:38,150 --> 00:09:33,209

people with pitchforks know your fan

217

00:09:41,449 --> 00:09:38,160

this stuff and it's it's daft okay now

218

00:09:43,850 --> 00:09:41,459

all of this is related to your YouTube

219

00:09:45,650 --> 00:09:43,860

channel in some sense yeah so can you

220

00:09:48,530 --> 00:09:45,660

tell us about yes so i started youtube

221

00:09:49,670 --> 00:09:48,540

channel almost six years ago now about I

222

00:09:50,720 --> 00:09:49,680

can you know about kilometer down the

223

00:09:53,750 --> 00:09:50,730

road because remain Chester at the

224

00:09:56,720 --> 00:09:53,760

moment and I really wanted to come at it

225

00:09:59,930 --> 00:09:56,730

from I guess a science-based skeptical

226

00:10:01,579 --> 00:09:59,940

view at some of the more common

227

00:10:04,040 --> 00:10:01,589

misconceptions out there in the general

228

00:10:05,920 --> 00:10:04,050

public and I wanted to come across as

229

00:10:09,079 --> 00:10:05,930

quite polite and nice because YouTube is

230

00:10:11,060 --> 00:10:09,089

particularly full of angry people who

231

00:10:12,710 --> 00:10:11,070

just like if you if you search for at no

232

00:10:14,270 --> 00:10:12,720

11 debunked you will find thousands of

233

00:10:15,860 --> 00:10:14,280

videos of people being like you're wrong

234

00:10:17,630 --> 00:10:15,870

you're effing this your f in there and

235

00:10:19,160 --> 00:10:17,640

same with GMOs I just want to be the

236

00:10:22,490 --> 00:10:19,170

nice guy that was like no that's kind of

237

00:10:24,770 --> 00:10:22,500

wrong this is why so I kind of naturally

238

00:10:26,300 --> 00:10:24,780

gravitated towards GMOs because there

239

00:10:27,890 --> 00:10:26,310

are so much misinformation out there

240

00:10:32,210 --> 00:10:27,900

there's so much rubbish out there and

241

00:10:33,650 --> 00:10:32,220

it's so misunderstood that even even

242

00:10:35,540 --> 00:10:33,660

people who you wouldn't think would fall

243

00:10:37,100 --> 00:10:35,550

for this would say oh but wait a second

244

00:10:38,810 --> 00:10:37,110

you know having the been shown to cause

245

00:10:41,329 --> 00:10:38,820

cancer having eyes on the links with

246

00:10:43,400 --> 00:10:41,339

GMOs and leukemia and then you like oh

247

00:10:46,220 --> 00:10:43,410

no these this is what this is coming

248

00:10:49,040 --> 00:10:46,230

from it's so prevalent out there but I

249

00:10:51,020 --> 00:10:49,050

have made a load of videos and a load of

250

00:10:53,000 --> 00:10:51,030

podcasts on it because there's just so

251  
00:10:55,280 --> 00:10:53,010  
much and you have large organizations

252  
00:10:57,770 --> 00:10:55,290  
like Greenpeace GM fries and the green

253  
00:10:59,660 --> 00:10:57,780  
party here in the UK who promote the

254  
00:11:05,750 --> 00:10:59,670  
idea these things are inherently bad and

255  
00:11:07,340 --> 00:11:05,760  
they are categorically wrong so sounds

256  
00:11:09,020 --> 00:11:07,350  
like Jim I was definitely a bit of a

257  
00:11:13,699 --> 00:11:09,030  
passion for you what other topics dude

258  
00:11:15,890 --> 00:11:13,709  
Oh other topics so at the moment as a

259  
00:11:19,040 --> 00:11:15,900  
bit of a downer I'm doing a thing on

260  
00:11:22,340 --> 00:11:19,050  
black south and I'm working on another

261  
00:11:23,810 --> 00:11:22,350  
video on mms so black South is it's

262  
00:11:26,900 --> 00:11:23,820  
particularly nasty it's been sold online

263  
00:11:29,569 --> 00:11:26,910

as a cancer cure and it's basically a

264

00:11:31,850 --> 00:11:29,579

pace that's a mixture of blood root

265

00:11:33,410 --> 00:11:31,860

extract is in chloride DMSO and few

266

00:11:35,110 --> 00:11:33,420

other bits and bobs sounds quite nice

267

00:11:37,220 --> 00:11:35,120

actually where they've got some at home

268

00:11:38,300 --> 00:11:37,230

but essentially you put it on your skin

269

00:11:43,550 --> 00:11:38,310

and

270

00:11:46,190 --> 00:11:43,560

will cause your whatever you put it on

271

00:11:47,720 --> 00:11:46,200

to die and it will fall off and there's

272

00:11:49,190 --> 00:11:47,730

this whole movement online trying to

273

00:11:50,510 --> 00:11:49,200

pass this stuff offers the amazing

274

00:11:52,550 --> 00:11:50,520

cancer cure that this stuff will some

275

00:11:54,140 --> 00:11:52,560

have soft cancer from out your body it

276

00:11:57,079 --> 00:11:54,150

won't it will just leave holes in you

277

00:11:59,090 --> 00:11:57,089

and there's also which is quite nasty as

278

00:12:01,310 --> 00:11:59,100

they promote self diagnosis so a lot of

279

00:12:03,800 --> 00:12:01,320

people with just the odd bumps and what

280

00:12:05,750 --> 00:12:03,810

have you I just put in them putting this

281

00:12:07,310 --> 00:12:05,760

stuff on them and then when it falls off

282

00:12:09,019 --> 00:12:07,320

like that was cancer because the idea is

283

00:12:10,760 --> 00:12:09,029

that if you if you put it on unit burns

284

00:12:12,410 --> 00:12:10,770

you it only burns cancer that's not the

285

00:12:14,300 --> 00:12:12,420

case it's going to burn everything the

286

00:12:16,190 --> 00:12:14,310

other one I'm working on is mms which is

287

00:12:18,740 --> 00:12:16,200

miracle mineral solution or miracle

288

00:12:22,370 --> 00:12:18,750

minerals or bleach Oh bleach yeah it's a

289

00:12:23,390 --> 00:12:22,380

yeah yeah so it is a bleach I've had so

290

00:12:24,680 --> 00:12:23,400

many people in the comment section

291

00:12:26,810 --> 00:12:24,690

YouTube saying like it's not a bleach

292

00:12:28,880 --> 00:12:26,820

learn some chemistry I'm the chemist I

293

00:12:30,470 --> 00:12:28,890

do this professionally I've been doing

294

00:12:35,510 --> 00:12:30,480

this for over a decade it's a bleach

295

00:12:38,450 --> 00:12:35,520

love yeah so this is a pretty nasty day

296

00:12:39,860 --> 00:12:38,460

they make this bleach in situ and then

297

00:12:41,840 --> 00:12:39,870

they drink it made claim that it can

298

00:12:43,730 --> 00:12:41,850

kill all sorts the guy Jim Humble who

299

00:12:46,579 --> 00:12:43,740

promoted it and what who started to the

300

00:12:48,560 --> 00:12:46,589

evening malaria tunnel uh uh I see

301  
00:12:50,990 --> 00:12:48,570  
what's probably motives are people as a

302  
00:12:52,880 --> 00:12:51,000  
Church's yet genesis too isn't it

303  
00:12:54,320 --> 00:12:52,890  
something like mazing yet it's a bit odd

304  
00:12:56,840 --> 00:12:54,330  
you got I've got I've just got a book

305  
00:12:58,850 --> 00:12:56,850  
from I think it's a thing it's for it

306  
00:13:00,800 --> 00:12:58,860  
provides him some for with some legal

307  
00:13:02,060 --> 00:13:00,810  
protection in certain countries making

308  
00:13:04,460 --> 00:13:02,070  
it so that that's why he does it yeah

309  
00:13:06,140 --> 00:13:04,470  
well I've just got his book before I

310  
00:13:07,670 --> 00:13:06,150  
came here actually said they'd sit home

311  
00:13:08,990 --> 00:13:07,680  
on my desk and I can't wait to read it

312  
00:13:11,360 --> 00:13:09,000  
because I just know it's going to be

313  
00:13:13,280 --> 00:13:11,370

terrible but yeah so there you promote

314

00:13:15,890 --> 00:13:13,290

that as a way of curing everything it's

315

00:13:18,050 --> 00:13:15,900

panthea this bleach in reality same as

316

00:13:19,670 --> 00:13:18,060

I'm a mess it will just burn you burn

317

00:13:22,520 --> 00:13:19,680

whatever it touches not to the extreme

318

00:13:25,220 --> 00:13:22,530

of M&MS but still pretty nasty stuff

319

00:13:26,990 --> 00:13:25,230

this move like stop yeah I'm sorry black

320

00:13:29,060 --> 00:13:27,000

South yeah and what's really awful as

321

00:13:33,560 --> 00:13:29,070

well is that they are promoting this as

322

00:13:35,150 --> 00:13:33,570

a autism cure and obviously these very

323

00:13:36,890 --> 00:13:35,160

autistic children don't drink something

324

00:13:39,050 --> 00:13:36,900

that's fizzing and smelling disgusting

325

00:13:41,930 --> 00:13:39,060

and producing a lot of flammable gas and

326

00:13:45,170 --> 00:13:41,940

so they recommend animals of this stuff

327

00:13:47,120 --> 00:13:45,180

and it says exactly as horrific as it

328

00:13:49,190 --> 00:13:47,130

sounds the kids get these animals the

329

00:13:51,560 --> 00:13:49,200

stuff burns their insides and then

330

00:13:53,180 --> 00:13:51,570

pass the lining of their intestines and

331

00:13:54,320 --> 00:13:53,190

the parents are told that this is

332

00:13:57,410 --> 00:13:54,330

actually parasites coming out their

333

00:14:00,770 --> 00:13:57,420

children and it goes on and on and it's

334

00:14:02,780 --> 00:14:00,780

really off on me I did a podcast on the

335

00:14:04,580 --> 00:14:02,790

League of nerds sorry shameless plug and

336

00:14:05,930 --> 00:14:04,590

which we had a chat thing called Jeff

337

00:14:08,020 --> 00:14:05,940

and we talked about this and he's worked

338

00:14:09,950 --> 00:14:08,030

with autistic children in the past me he

339

00:14:11,540 --> 00:14:09,960

he never said it but it was almost

340

00:14:13,820 --> 00:14:11,550

hinting that he's had some dealings with

341

00:14:15,710 --> 00:14:13,830

in the past and he said that a lot of

342

00:14:17,600 --> 00:14:15,720

the stories that he was hearing was that

343

00:14:21,080 --> 00:14:17,610

these children who are autistic will

344

00:14:23,480 --> 00:14:21,090

suddenly was taking a mms like show like

345

00:14:25,910 --> 00:14:23,490

slight progress i'm almost but it wasn't

346

00:14:27,500 --> 00:14:25,920

it was the horrific nurse of it that the

347

00:14:28,940 --> 00:14:27,510

pain of it everything was just pushing

348

00:14:30,790 --> 00:14:28,950

and ceiling like they were going

349

00:14:34,400 --> 00:14:30,800

basically through the haze and

350

00:14:36,530 --> 00:14:34,410

verbalizing their their distress and

351  
00:14:38,060 --> 00:14:36,540  
then going back it into where there were

352  
00:14:40,370 --> 00:14:38,070  
before and it's really awful because

353  
00:14:41,960 --> 00:14:40,380  
these parents were nothing better than

354  
00:14:45,380 --> 00:14:41,970  
you know to help their kids out and

355  
00:14:48,020 --> 00:14:45,390  
these parasites these mms pushes are

356  
00:14:49,750 --> 00:14:48,030  
just latching on to that it's all so

357  
00:14:52,250 --> 00:14:49,760  
sorry for being miserable I know yet but

358  
00:14:54,800 --> 00:14:52,260  
when we deal with quacks it's sometimes

359  
00:14:56,630 --> 00:14:54,810  
miserable that's the way it is so miles

360  
00:14:58,340 --> 00:14:56,640  
oh where can people find out more about

361  
00:14:59,780 --> 00:14:58,350  
what you do alright so if you're a fine

362  
00:15:01,700 --> 00:14:59,790  
you I've got a website Mars powder coat

363  
00:15:03,980 --> 00:15:01,710

at UK or mon youtube just search my name

364

00:15:07,850 --> 00:15:03,990

or my youtube now about my youtube is

365

00:15:09,170 --> 00:15:07,860

param 1985 I can't change that so well I

366

00:15:10,250 --> 00:15:09,180

can actually I've been told I can change

367

00:15:11,870 --> 00:15:10,260

it but now I've got so used to people

368

00:15:13,370 --> 00:15:11,880

use all time that if I were to change it

369

00:15:14,840 --> 00:15:13,380

they wouldn't find me but yeah check me

370

00:15:17,500 --> 00:15:14,850

out if you think I'm interesting i'm not

371

00:15:19,640 --> 00:15:17,510

really i'm really boring so sorry i

372

00:15:29,569 --> 00:15:19,650

don't think that thank you very much

373

00:15:36,900 --> 00:15:33,539

and now direct from the cafe at

374

00:15:43,650 --> 00:15:36,910

Australia's science channel its brouhaha

375

00:15:45,749 --> 00:15:43,660

with tenure Meyer have you seen the new

376

00:15:48,929 --> 00:15:45,759

contender for your science bucket lists

377

00:15:51,539 --> 00:15:48,939

China just built a freaking massive

378

00:15:54,449 --> 00:15:51,549

radio telescope it's civil engineering

379

00:15:56,579 --> 00:15:54,459

latest claim to fame not just for its

380

00:15:58,469 --> 00:15:56,589

size but for its ability to keep

381

00:16:01,859 --> 00:15:58,479

tracking a signal even as the Earth

382

00:16:04,499 --> 00:16:01,869

rotates but wait there's more and it's

383

00:16:06,689 --> 00:16:04,509

fun for the whole family while the

384

00:16:09,239 --> 00:16:06,699

telescope's searching for alien radio

385

00:16:11,239 --> 00:16:09,249

signals you can watch the giant dish

386

00:16:15,029 --> 00:16:11,249

from the mountaintop observation deck

387

00:16:17,849 --> 00:16:15,039

hang out at the theme park essential to

388

00:16:20,009 --> 00:16:17,859

all radio telescopes of course stay

389

00:16:23,039 --> 00:16:20,019

overnight in the Astronomy themed hotel

390

00:16:25,979 --> 00:16:23,049

and even take home a souvenir maybe a

391

00:16:29,399 --> 00:16:25,989

t-shirt saying i went to china and all I

392

00:16:31,859 --> 00:16:29,409

ate was this dish or maybe just a

393

00:16:35,369 --> 00:16:31,869

postcard as electronic gadgets aren't

394

00:16:38,729 --> 00:16:35,379

allowed even in flight mode so what else

395

00:16:41,449 --> 00:16:38,739

is on your science bucket list soon the

396

00:16:45,299 --> 00:16:41,459

Northern Lights Kennedy Space Center

397

00:16:51,960 --> 00:16:45,309

Yellowstone National Park Tatooine Deep

398

00:16:54,960 --> 00:16:51,970

Space nine the Death Star Mars mortal

399

00:17:06,499 --> 00:16:54,970

for more brouhaha and Australian science

400

00:17:14,250 --> 00:17:11,100

here's my not spooky action at a

401  
00:17:20,439 --> 00:17:17,470  
I'm in the foyer of the seymour centre

402  
00:17:23,559 --> 00:17:20,449  
which tonight is host to think inc vent

403  
00:17:26,679 --> 00:17:23,569  
I evening with at Lisa Randall at the

404  
00:17:28,600 --> 00:17:26,689  
moment I it's unheard of I'm early

405  
00:17:30,210 --> 00:17:28,610  
there's no sign of Richard Saunders

406  
00:17:32,860 --> 00:17:30,220  
Richard Saunders is actually late

407  
00:17:34,390 --> 00:17:32,870  
probably by those crazy bars where he

408  
00:17:35,710 --> 00:17:34,400  
was all night last night he's probably

409  
00:17:38,980 --> 00:17:35,720  
still around there somewhere right now

410  
00:17:40,930 --> 00:17:38,990  
but we're going to be taken by guide to

411  
00:17:43,750 --> 00:17:40,940  
a special area of the seymour centre

412  
00:17:46,480 --> 00:17:43,760  
fairly shortly where we will meet dr.

413  
00:17:48,160 --> 00:17:46,490

Lisa Randall now I'm gonna be asking

414

00:17:50,410 --> 00:17:48,170

some questions about cosmology I'm going

415

00:17:52,960 --> 00:17:50,420

to ask me a few questions about the

416

00:17:56,169 --> 00:17:52,970

meaning of the universe I'm going to be

417

00:17:59,530 --> 00:17:56,179

asking why is there a hemispherical type

418

00:18:01,240 --> 00:17:59,540

object on the poles of both neptune and

419

00:18:03,480 --> 00:18:01,250

saturn stuff like that pretty important

420

00:18:07,360 --> 00:18:03,490

stuff should you kiss on a first date

421

00:18:09,460 --> 00:18:07,370

that's sort of stuff who we got here I'm

422

00:18:10,810 --> 00:18:09,470

sick Nadine it's good to see he once

423

00:18:12,370 --> 00:18:10,820

again I like people to recognize your

424

00:18:13,750 --> 00:18:12,380

voice and then now why are you belong

425

00:18:15,010 --> 00:18:13,760

here because it's astrophysics sure

426

00:18:16,990 --> 00:18:15,020

thing what's your exciting thing about

427

00:18:20,350 --> 00:18:17,000

science anyway what's your area you love

428

00:18:22,130 --> 00:18:20,360

all of them okay Oh them basically so

429

00:18:25,010 --> 00:18:22,140

any science thing I'm

430

00:18:26,660 --> 00:18:25,020

you probably see me there any science

431

00:18:30,590 --> 00:18:26,670

writing thing any science festival

432

00:18:34,340 --> 00:18:30,600

marine biology sure I love marine

433

00:18:36,020 --> 00:18:34,350

biology okay cryptology sure I don't

434

00:18:38,900 --> 00:18:36,030

know that much about crab told you but I

435

00:18:42,020 --> 00:18:38,910

would be interested in it archaeology oh

436

00:18:44,000 --> 00:18:42,030

yeah Wow okay oh definitely you can just

437

00:18:45,620 --> 00:18:44,010

keep throwing scientific areas at me but

438

00:18:49,220 --> 00:18:45,630

because my job also involves about

439

00:18:52,760 --> 00:18:49,230

writing around large just different

440

00:18:54,530 --> 00:18:52,770

areas it's it's all of it basically I've

441

00:18:56,920 --> 00:18:54,540

written about mathematics have written

442

00:19:00,140 --> 00:18:56,930

about space have rested about biology

443

00:19:01,220 --> 00:19:00,150

conservation energy so you just have to

444

00:19:03,620 --> 00:19:01,230

be across all of it when you're a

445

00:19:04,880 --> 00:19:03,630

scientist I know it's a bit like but

446

00:19:09,200 --> 00:19:04,890

it's kind of like being the sports

447

00:19:10,970 --> 00:19:09,210

editor but then again yeah Oh Venice

448

00:19:14,720 --> 00:19:10,980

boards at it no no look who who can't

449

00:19:16,910 --> 00:19:14,730

sports I say ah now can you understand

450

00:19:20,360 --> 00:19:16,920

the formula that her name is attached to

451  
00:19:23,510 --> 00:19:20,370  
the one that influences gravity haven't

452  
00:19:26,000 --> 00:19:23,520  
looked into that actually but it sounds

453  
00:19:28,340 --> 00:19:26,010  
like she's done a lot of really

454  
00:19:30,080 --> 00:19:28,350  
interesting astrophysics work and I'm

455  
00:19:33,230 --> 00:19:30,090  
mostly interested also in her latest

456  
00:19:34,730 --> 00:19:33,240  
book called dark matter and dinosaurs I

457  
00:19:36,260 --> 00:19:34,740  
haven't read it yet I haven't picked it

458  
00:19:38,180 --> 00:19:36,270  
up yet but I'm hoping to get a copy

459  
00:19:39,770 --> 00:19:38,190  
sanaya there's a bit puzzled by that cuz

460  
00:19:42,800 --> 00:19:39,780  
I thought why pick dark matter you might

461  
00:19:45,260 --> 00:19:42,810  
as well just say hydrogen caused it why

462  
00:19:46,820 --> 00:19:45,270  
is that because well there's lots of

463  
00:19:49,040 --> 00:19:46,830

dark matter in the universe has lots of

464

00:19:51,230 --> 00:19:49,050

hydrogen why not make hydrogen the comp

465

00:19:55,130 --> 00:19:51,240

the culprit yeah but there's more dark

466

00:19:57,620 --> 00:19:55,140

matter than hydrogen get it really yes

467

00:19:59,180 --> 00:19:57,630

because I think dr. Hodges number one I

468

00:20:00,800 --> 00:19:59,190

saw it on the periodic table yeah but

469

00:20:02,630 --> 00:20:00,810

that's what this stuff we can see in the

470

00:20:04,580 --> 00:20:02,640

subway can see is only like five percent

471

00:20:06,460 --> 00:20:04,590

of everything else the dark matter is by

472

00:20:10,039 --> 00:20:06,470

far

473

00:20:11,989 --> 00:20:10,049

abundant thing out there once again

474

00:20:13,489 --> 00:20:11,999

you're correct my turn my tiny eight

475

00:20:14,960 --> 00:20:13,499

brain has not been thinking hard enough

476

00:20:16,970 --> 00:20:14,970

no i think you're being too hard on

477

00:20:19,489 --> 00:20:16,980

yourself what are you looking forward to

478

00:20:21,680 --> 00:20:19,499

Lisa talking about on stage to know well

479

00:20:23,090 --> 00:20:21,690

given like the topic of her book I'm

480

00:20:24,979 --> 00:20:23,100

looking forward to the connections

481

00:20:26,570 --> 00:20:24,989

between all the different branches of

482

00:20:29,210 --> 00:20:26,580

science that she's interested I mean

483

00:20:31,909 --> 00:20:29,220

she's an astrophysicist but I'm finding

484

00:20:33,680 --> 00:20:31,919

the patterns and finding the the bigger

485

00:20:36,259 --> 00:20:33,690

picture about how all the different

486

00:20:38,330 --> 00:20:36,269

things fit together and the and the gaps

487

00:20:40,310 --> 00:20:38,340

in our knowledge like dark matter and

488

00:20:42,799 --> 00:20:40,320

dark energy that's what I'm really

489

00:20:44,029 --> 00:20:42,809

interested in is seeing the whole lay of

490

00:20:46,190 --> 00:20:44,039

the land how everything fits together

491

00:20:48,019 --> 00:20:46,200

and what are the uncharted territories

492

00:20:50,060 --> 00:20:48,029

we might be able to learn some more

493

00:20:51,249 --> 00:20:50,070

about and tonight she's actually the

494

00:20:53,359 --> 00:20:51,259

subject of a sleep deprivation

495

00:20:55,970 --> 00:20:53,369

experiment as well so we'll hope for the

496

00:20:57,560 --> 00:20:55,980

best yeah sounds like it but I think

497

00:20:59,389 --> 00:20:57,570

that's the last event so then she'll be

498

00:21:01,669 --> 00:20:59,399

off the hook and she can enjoy a strange

499

00:21:03,139 --> 00:21:01,679

it off down the cross obviously all

500

00:21:07,789 --> 00:21:03,149

right I should be disappointed us will

501  
00:21:09,830 --> 00:21:07,799  
be shot I'm talking about dr. Lisa

502  
00:21:11,299 --> 00:21:09,840  
Randall and I believe you're very tired

503  
00:21:12,529 --> 00:21:11,309  
are you just off the plane are you I'm

504  
00:21:14,330 --> 00:21:12,539  
not just off the plane but I've been

505  
00:21:16,039 --> 00:21:14,340  
taking many planes since I've been here

506  
00:21:18,019 --> 00:21:16,049  
I'm a little tired have you got any

507  
00:21:20,090 --> 00:21:18,029  
advice to someone with many degrees as

508  
00:21:23,090 --> 00:21:20,100  
to how the rest of us can somehow avoid

509  
00:21:25,129 --> 00:21:23,100  
jet lag nope I think I think I'm

510  
00:21:27,590 --> 00:21:25,139  
sleeping a lot it's a good idea you know

511  
00:21:28,639 --> 00:21:27,600  
I can hoping you get some today what

512  
00:21:30,109 --> 00:21:28,649  
sort of questions you've been getting

513  
00:21:31,940 --> 00:21:30,119

people either been talking about your

514

00:21:33,649 --> 00:21:31,950

Dark Matter dinosaur connection up there

515

00:21:36,200 --> 00:21:33,659

yeah a lot of people want to know about

516

00:21:37,330 --> 00:21:36,210

dark matter about all the research that

517

00:21:39,490 --> 00:21:37,340

I do in fact

518

00:21:41,320 --> 00:21:39,500

and is it difficult when you're doing a

519

00:21:43,030 --> 00:21:41,330

presentation such as this that's so

520

00:21:44,740 --> 00:21:43,040

technical when you're so tired doing

521

00:21:46,630 --> 00:21:44,750

Mike slip up with something is that make

522

00:21:49,510 --> 00:21:46,640

you extra nervous so you just power

523

00:21:50,530 --> 00:21:49,520

through makes me tired the remind you of

524

00:21:52,720 --> 00:21:50,540

your days when you had to sit for exams

525

00:21:55,510 --> 00:21:52,730

and just keep staying no a different no

526

00:21:56,830 --> 00:21:55,520

I mean yeah I know it's a good and it's

527

00:21:58,870 --> 00:21:56,840

fun to see the enthusiasm in the

528

00:21:59,770 --> 00:21:58,880

audience so that's good mm-hmm and get

529

00:22:02,410 --> 00:21:59,780

what do you think of the attitude

530

00:22:03,880 --> 00:22:02,420

towards women in science in Australia is

531

00:22:05,950 --> 00:22:03,890

it any different to what you could you

532

00:22:07,330 --> 00:22:05,960

talk about that in America isn't even

533

00:22:08,860 --> 00:22:07,340

hard to say i mean i've seen some

534

00:22:11,350 --> 00:22:08,870

wonderful women scientists here that's

535

00:22:13,210 --> 00:22:11,360

all i can say so I don't really know it

536

00:22:15,010 --> 00:22:13,220

seems like people are enthusiastic to

537

00:22:16,420 --> 00:22:15,020

see us here but you know I'm here to

538

00:22:29,410 --> 00:22:16,430

talk about science and people want to

539

00:22:36,290 --> 00:22:32,540

you're entering through doors four and

540

00:22:41,420 --> 00:22:36,300

five thank you very much day blasphemy

541

00:22:43,250 --> 00:22:41,430

ultimately time cold drinks ah oh well

542

00:22:45,650 --> 00:22:43,260

as I predicted earlier Richard Saunders

543

00:22:48,440 --> 00:22:45,660

was late so man you you missed the whole

544

00:22:50,420 --> 00:22:48,450

thing I was late because I was coming on

545

00:22:52,160 --> 00:22:50,430

a train and then I had to drive the car

546

00:22:55,100 --> 00:22:52,170

you know sydney's like that man up there

547

00:22:59,450 --> 00:22:55,110

was free cheese you missed the free

548

00:23:01,010 --> 00:22:59,460

cheese I missed free cheese as free

549

00:23:02,450 --> 00:23:01,020

cheese and wasn't even a wheel it was

550

00:23:04,550 --> 00:23:02,460

like cut up like really nice and it

551  
00:23:06,440 --> 00:23:04,560  
wasn't even from aldi or anything you

552  
00:23:09,800 --> 00:23:06,450  
mean it was better than aldi cheddar

553  
00:23:11,930 --> 00:23:09,810  
okay look I've got losing that look like

554  
00:23:14,530 --> 00:23:11,940  
we're currently inside here and it's a

555  
00:23:17,030 --> 00:23:14,540  
the the mood to be described as

556  
00:23:19,310 --> 00:23:17,040  
intellectual I think that's a very good

557  
00:23:21,110 --> 00:23:19,320  
description the other Hall is slowly

558  
00:23:23,150 --> 00:23:21,120  
filling up lots of people milling around

559  
00:23:27,950 --> 00:23:23,160  
and looks like we're in for an

560  
00:23:30,170 --> 00:23:27,960  
interesting evening so without I think

561  
00:23:32,510 --> 00:23:30,180  
it's time to welcome professor Randall

562  
00:23:35,120 --> 00:23:32,520  
on stage I think I need some help from

563  
00:23:43,920 --> 00:23:35,130

you guys to do this quick please have a

564

00:23:49,870 --> 00:23:47,590

the lights dimmed and dr. tamara davis

565

00:23:53,530 --> 00:23:49,880

was our host for a delightful couple of

566

00:23:57,880 --> 00:23:53,540

hours with dr. Lisa Randall cosmology

567

00:23:59,560 --> 00:23:57,890

Dark Matter dark energy the Big Bang the

568

00:24:01,690 --> 00:23:59,570

speed of light all these wonderful

569

00:24:03,820 --> 00:24:01,700

things were covered followed by some

570

00:24:06,640 --> 00:24:03,830

really interesting questions from the

571

00:24:08,200 --> 00:24:06,650

floor people of all ages after the event

572

00:24:15,820 --> 00:24:08,210

may not caught up with some of the

573

00:24:17,230 --> 00:24:15,830

people who are in the ordinance poor

574

00:24:19,450 --> 00:24:17,240

people are streaming out now after a

575

00:24:20,590 --> 00:24:19,460

fairly exciting pitov science there but

576  
00:24:21,940 --> 00:24:20,600  
someone who should be doubly exciting

577  
00:24:24,310 --> 00:24:21,950  
because they got a free ticket here you

578  
00:24:25,900 --> 00:24:24,320  
a winner in the world of the skeptic

579  
00:24:27,430 --> 00:24:25,910  
zone who are you and how did you win and

580  
00:24:28,690 --> 00:24:27,440  
what the hell did you win anyway hello

581  
00:24:30,340 --> 00:24:28,700  
I'm William broom I've been with

582  
00:24:32,020 --> 00:24:30,350  
Australian skeptics and skeptics in the

583  
00:24:34,240 --> 00:24:32,030  
pub for a while now and I hadn't been to

584  
00:24:36,190 --> 00:24:34,250  
a meeting for about six or seven years I

585  
00:24:39,040 --> 00:24:36,200  
saw Richard in a supermarket in Waterloo

586  
00:24:40,630 --> 00:24:39,050  
aldi bit of advertising and in the dairy

587  
00:24:43,540 --> 00:24:40,640  
section or he's a bit of a ham man

588  
00:24:45,190 --> 00:24:43,550

really um he's often seen look when he

589

00:24:47,320 --> 00:24:45,200

gets over to what's that bloody place

590

00:24:49,840 --> 00:24:47,330

you go to costco when he gets the costco

591

00:24:51,940 --> 00:24:49,850

he buys a giant salmon the size of a

592

00:24:53,650 --> 00:24:51,950

debt ssin and takes at home so what was

593

00:24:56,650 --> 00:24:53,660

he up to in the fridge here he was there

594

00:24:58,870 --> 00:24:56,660

just for the halibut time and a place

595

00:25:00,460 --> 00:24:58,880

but anyway yeah so I saw it makes it

596

00:25:02,440 --> 00:25:00,470

come along to skeptics in the pub so I

597

00:25:04,690 --> 00:25:02,450

think a week later I came along it was a

598

00:25:06,700 --> 00:25:04,700

new venue it used to be around gold

599

00:25:09,820 --> 00:25:06,710

street so it was further down me winded

600

00:25:13,510 --> 00:25:09,830

came along there was a raffle I won the

601  
00:25:14,950 --> 00:25:13,520  
raffle hey now so I came today and I

602  
00:25:16,990 --> 00:25:14,960  
thought it was fascinating I know

603  
00:25:19,060 --> 00:25:17,000  
nothing about physics yeah the what was

604  
00:25:21,640 --> 00:25:19,070  
it thing you learn today I learned about

605  
00:25:24,460 --> 00:25:21,650  
the the potential dark plane around the

606  
00:25:25,870 --> 00:25:24,470  
galaxy cool dark matter I think that's

607  
00:25:27,010 --> 00:25:25,880  
the word don't ask me what it is now I

608  
00:25:28,300 --> 00:25:27,020  
probably couldn't tell you but you're

609  
00:25:30,460 --> 00:25:28,310  
gonna remember whenever people say dark

610  
00:25:32,560 --> 00:25:30,470  
matter you go well it's it's very badly

611  
00:25:35,440 --> 00:25:32,570  
title it should be called transparent

612  
00:25:37,000 --> 00:25:35,450  
matter absolutely but what Lisa Randall

613  
00:25:39,160 --> 00:25:37,010

dr. Lisa Randall does she talks in

614

00:25:40,780 --> 00:25:39,170

layman's terms so she makes it

615

00:25:42,430 --> 00:25:40,790

accessible for people like myself who

616

00:25:45,010 --> 00:25:42,440

are not scientists you can talk to me

617

00:25:46,870 --> 00:25:45,020

forever about sidekicks etc but you get

618

00:25:48,989 --> 00:25:46,880

me on astrophysics or anything like that

619

00:25:50,909 --> 00:25:48,999

and it like goes way over my

620

00:25:52,889 --> 00:25:50,919

but come to like something like this

621

00:25:55,589 --> 00:25:52,899

it's actually very accessible and it

622

00:25:57,059 --> 00:25:55,599

they make it easier to understand but

623

00:25:59,069 --> 00:25:57,069

what I really loved was the questions

624

00:26:01,679 --> 00:25:59,079

well my favorite was one that stumped

625

00:26:03,749 --> 00:26:01,689

her a student probably a high school

626

00:26:05,789 --> 00:26:03,759

student she asked her about the physics

627

00:26:07,769 --> 00:26:05,799

of ant-man and she couldn't answer it

628

00:26:10,559 --> 00:26:07,779

because she didn't see the movie which I

629

00:26:13,109 --> 00:26:10,569

think's a in her biological and

630

00:26:15,809 --> 00:26:13,119

the intellectual armor that's what I

631

00:26:17,729 --> 00:26:15,819

love that is one of a lack of popular

632

00:26:20,219 --> 00:26:17,739

culture the questions that's the

633

00:26:22,349 --> 00:26:20,229

highlight for me for diversity or the

634

00:26:23,819 --> 00:26:22,359

variety and the color of the questions

635

00:26:25,379 --> 00:26:23,829

and i think it was quite a diverse

636

00:26:27,779 --> 00:26:25,389

audience and i think that's what you

637

00:26:30,389 --> 00:26:27,789

need at things like this it adds that

638

00:26:31,799 --> 00:26:30,399

extra energy that does cool so i guess

639

00:26:35,669 --> 00:26:31,809

we can see the next skeptics of the pub

640

00:26:37,829 --> 00:26:35,679

then i shall be there ebuddy Emma's

641

00:26:39,659 --> 00:26:37,839

first off in the questions for dr.

642

00:26:41,399 --> 00:26:39,669

Randall and you got offered one of those

643

00:26:42,989 --> 00:26:41,409

silly philosophical bloody things you

644

00:26:45,719 --> 00:26:42,999

didn't ask anything scientific they

645

00:26:48,089 --> 00:26:45,729

are an engineer you asked about does the

646

00:26:49,799 --> 00:26:48,099

fact that the arrow of time goes forward

647

00:26:53,609 --> 00:26:49,809

whether that has anything to do it free

648

00:26:55,259 --> 00:26:53,619

will yes indeed well a physicist claim

649

00:26:57,299 --> 00:26:55,269

to know how the whole universe works at

650

00:26:59,339 --> 00:26:57,309

a fundamental level so they should be

651  
00:27:01,469 --> 00:26:59,349  
able to ask you answer any question I

652  
00:27:03,749 --> 00:27:01,479  
believe well I think the hologram theory

653  
00:27:05,759 --> 00:27:03,759  
says is to us that probably the instead

654  
00:27:08,039 --> 00:27:05,769  
of us actually creating the future the

655  
00:27:09,629 --> 00:27:08,049  
future dictates the past that that's

656  
00:27:11,789 --> 00:27:09,639  
what I actually think I think that

657  
00:27:13,439 --> 00:27:11,799  
because it creates the past the future

658  
00:27:16,979 --> 00:27:13,449  
dictates the past because it's already

659  
00:27:19,649 --> 00:27:16,989  
there so of course we are actually have

660  
00:27:21,929 --> 00:27:19,659  
to conform to it not vice versa it's

661  
00:27:24,779 --> 00:27:21,939  
quite interesting that's a that's a

662  
00:27:27,839 --> 00:27:24,789  
possible view of the universe being a

663  
00:27:31,589 --> 00:27:27,849

bag of events and each event has a label

664

00:27:33,329 --> 00:27:31,599

XYZ and T hmm a four-vector exact so

665

00:27:37,589 --> 00:27:33,339

yeah no no one to say which one came

666

00:27:39,749 --> 00:27:37,599

first each event exists or existed you

667

00:27:41,909 --> 00:27:39,759

didn't even need tenses in the English

668

00:27:45,359 --> 00:27:41,919

language anymore you to seat each event

669

00:27:48,509 --> 00:27:45,369

exists little own Latin well the

670

00:27:50,579 --> 00:27:48,519

coalition I look and I say what one of

671

00:27:53,639 --> 00:27:50,589

the people that got short shrift in the

672

00:27:55,769 --> 00:27:53,649

talk and it's not a criticism is it um a

673

00:27:56,879 --> 00:27:55,779

lot of the vehicles theoretical stuff

674

00:28:00,130 --> 00:27:56,889

and things that they're working on their

675

00:28:01,960 --> 00:28:00,140

requires the unsung heroine

676

00:28:04,000 --> 00:28:01,970

and heroes of science and that is

677

00:28:06,420 --> 00:28:04,010

engineers people that can build the

678

00:28:08,860 --> 00:28:06,430

equipment to prove the experiments

679

00:28:10,540 --> 00:28:08,870

exactly yes the and they didn't get a

680

00:28:12,310 --> 00:28:10,550

mention they didn't get a word in beside

681

00:28:14,290 --> 00:28:12,320

us get all the credit but the engineers

682

00:28:15,760 --> 00:28:14,300

usually make the apparatus yes that's

683

00:28:18,010 --> 00:28:15,770

what is that's exactly what i was

684

00:28:19,660 --> 00:28:18,020

thinking and of course you know and they

685

00:28:20,980 --> 00:28:19,670

are always booked often than men but of

686

00:28:22,570 --> 00:28:20,990

course more and more they should be

687

00:28:24,520 --> 00:28:22,580

women engineers out there I reckon I

688

00:28:26,470 --> 00:28:24,530

should've got a mention indeed yes that

689

00:28:28,060 --> 00:28:26,480

would be a good thing cookies I know but

690

00:28:29,830 --> 00:28:28,070

you have to talk to dr. Lisa here and

691

00:28:30,850 --> 00:28:29,840

dr. Randall hearing you a huge fan

692

00:28:33,250 --> 00:28:30,860

what's your name and what are you

693

00:28:35,830 --> 00:28:33,260

studying my name's Siobhan and I just

694

00:28:39,160 --> 00:28:35,840

visit finish my physics degree at Anu in

695

00:28:41,530 --> 00:28:39,170

Canberra high distinction I don't know

696

00:28:42,670 --> 00:28:41,540

yet results oh it's at nervous time

697

00:28:44,200 --> 00:28:42,680

where you don't find out for a while

698

00:28:46,450 --> 00:28:44,210

there so what was it like actually going

699

00:28:48,460 --> 00:28:46,460

to ask her a question yeah it's pretty

700

00:28:50,620 --> 00:28:48,470

great I mean I've admired her from afar

701  
00:28:52,690 --> 00:28:50,630  
for many years so to actually be in the

702  
00:28:54,460 --> 00:28:52,700  
same room as her it's quite cool okay

703  
00:28:55,810 --> 00:28:54,470  
cool and you got another chance you're

704  
00:28:59,020 --> 00:28:55,820  
going to ask us something again no

705  
00:29:02,020 --> 00:28:59,030  
probably not she's very been a long

706  
00:29:03,580 --> 00:29:02,030  
night already for thank you I look just

707  
00:29:04,690 --> 00:29:03,590  
on one note here I'm incredibly

708  
00:29:07,630 --> 00:29:04,700  
disappointed that there was not one

709  
00:29:09,190 --> 00:29:07,640  
mention of Planck time the entire night

710  
00:29:11,110 --> 00:29:09,200  
we had almost an hour and a half of

711  
00:29:13,550 --> 00:29:11,120  
theoretical physics there and the phrase

712  
00:29:15,500 --> 00:29:13,560  
Planck time was not mentioned

713  
00:29:31,299 --> 00:29:15,510

so disappointed cuz I still don't know

714

00:29:37,279 --> 00:29:34,159

the skeptic magazine the journal from

715

00:29:39,500 --> 00:29:37,289

Australian skeptics subscribe online to

716

00:29:44,810 --> 00:29:39,510

the world's second oldest skeptical

717

00:29:47,570 --> 00:29:44,820

magazine visit w WC OMG you and click

718

00:29:51,529 --> 00:29:47,580

the publication's league you can also

719

00:29:54,860 --> 00:29:51,539

find their over 30 years on back issues

720

00:30:13,320 --> 00:29:54,870

free to download the skeptic magazine

721

00:30:19,140 --> 00:30:15,840

another look at the mind-body wallet

722

00:30:21,300 --> 00:30:19,150

festival this time from 1998 from the

723

00:30:25,860 --> 00:30:21,310

skeptic magazine the Australian skeptics

724

00:30:30,300 --> 00:30:25,870

journal vol 18 number to a report by

725

00:30:32,370 --> 00:30:30,310

Trevor case festival of the wallet if

726

00:30:35,750 --> 00:30:32,380

you think that belief in the paranormal

727

00:30:38,730 --> 00:30:35,760

pseudoscience etc is not widespread

728

00:30:42,390 --> 00:30:38,740

suspend your judgment and Lee attend a

729

00:30:44,100 --> 00:30:42,400

mind body and spirit festival on May the

730

00:30:46,230 --> 00:30:44,110

second three members of the New South

731

00:30:49,080 --> 00:30:46,240

Wales Committee Richard lead Linda Brown

732

00:30:52,350 --> 00:30:49,090

and I went to one such festival at

733

00:30:54,870 --> 00:30:52,360

darling harbour our conclusion belief in

734

00:30:57,560 --> 00:30:54,880

the paranormal pseudoscience and the

735

00:31:00,120 --> 00:30:57,570

supernatural is alive and kicking

736

00:31:02,340 --> 00:31:00,130

despite the miserable weather and the

737

00:31:05,790 --> 00:31:02,350

pundits turned out in droves to attend

738

00:31:08,280 --> 00:31:05,800

this mecca of promised enlightenment how

739

00:31:10,050 --> 00:31:08,290

much did it cost to enter the world of

740

00:31:14,850 --> 00:31:10,060

the enlightened and to mingle with

741

00:31:16,830 --> 00:31:14,860

self-styled gurus a token \$12 well that

742

00:31:19,410 --> 00:31:16,840

got you through the door anyway to buy

743

00:31:22,500 --> 00:31:19,420

merchandise or ten courses the cost was

744

00:31:25,200 --> 00:31:22,510

considerably greater once inside the

745

00:31:28,710 --> 00:31:25,210

aroma burning incense the sound of

746

00:31:31,440 --> 00:31:28,720

synthesized dolphin squeals set the

747

00:31:33,480 --> 00:31:31,450

stage check your critical faculties at

748

00:31:35,550 --> 00:31:33,490

the door there's no place for the

749

00:31:38,250 --> 00:31:35,560

limited world of rationality of this

750

00:31:41,700 --> 00:31:38,260

exhibition open your mind open your

751  
00:31:44,520 --> 00:31:41,710  
heart most of all open your wallet there

752  
00:31:46,650 --> 00:31:44,530  
were over 200 exhibits in all so

753  
00:31:49,230 --> 00:31:46,660  
ambitiously we decided to divide and

754  
00:31:51,420 --> 00:31:49,240  
conquer now we have all seen magic

755  
00:31:53,370 --> 00:31:51,430  
happens bumper stickers and twenty

756  
00:31:55,620 --> 00:31:53,380  
dollar tarot card readings at local

757  
00:31:57,690 --> 00:31:55,630  
shopping centres but in this time of

758  
00:31:59,940 --> 00:31:57,700  
unparalleled scientific and

759  
00:32:01,980 --> 00:31:59,950  
technological advances are people

760  
00:32:04,800 --> 00:32:01,990  
willing to swallow any ridiculous claim

761  
00:32:07,290 --> 00:32:04,810  
moreover is there really any money to be

762  
00:32:09,810 --> 00:32:07,300  
made in peddling poppycock from our

763  
00:32:11,520 --> 00:32:09,820

observations at the mind-body-spirit

764

00:32:15,720 --> 00:32:11,530

festival the answer to these questions

765

00:32:18,060 --> 00:32:15,730

is an unqualified yes most of the

766

00:32:20,160 --> 00:32:18,070

exhibits were inundated with people who

767

00:32:23,130 --> 00:32:20,170

were ready and willing to part with cash

768

00:32:25,380 --> 00:32:23,140

for merchandise in fact the exhibition

769

00:32:27,000 --> 00:32:25,390

center was so crowded at one point it

770

00:32:29,340 --> 00:32:27,010

became impossible to move in

771

00:32:31,950 --> 00:32:29,350

any direction throughout the day people

772

00:32:34,380 --> 00:32:31,960

were queuing up to pay thirty dollars

773

00:32:38,250 --> 00:32:34,390

for a half hour reading from any one of

774

00:32:41,790 --> 00:32:38,260

approximately forty psychics there were

775

00:32:43,680 --> 00:32:41,800

iridology consultants or reading Reiki

776

00:32:46,640 --> 00:32:43,690

treatments and exhibitions on the

777

00:32:50,400 --> 00:32:46,650

therapeutic crystals Kirlian photography

778

00:32:53,250 --> 00:32:50,410

holistic dental treatment and angels to

779

00:32:54,870 --> 00:32:53,260

list but a few we managed to speak with

780

00:32:56,610 --> 00:32:54,880

some of the exhibitors about the

781

00:33:00,720 --> 00:32:56,620

products and services they were offering

782

00:33:03,570 --> 00:33:00,730

and one exhibition on holistic dental

783

00:33:05,910 --> 00:33:03,580

treatment it was claimed that teeth are

784

00:33:08,580 --> 00:33:05,920

related to different parts of the body

785

00:33:11,250 --> 00:33:08,590

and via acupuncture meridians I

786

00:33:13,200 --> 00:33:11,260

indicated my surprise and asked if there

787

00:33:16,170 --> 00:33:13,210

was any scientific evidence to support

788

00:33:19,380 --> 00:33:16,180

this claim I was told of a study

789

00:33:21,810 --> 00:33:19,390

appearing in a non refereed journal in

790

00:33:24,840 --> 00:33:21,820

which a tooth was removed from human

791

00:33:27,840 --> 00:33:24,850

patient who suffered a cardiac disease

792

00:33:30,630 --> 00:33:27,850

and implanted in a rabbit apparently the

793

00:33:33,210 --> 00:33:30,640

rabbit consequently developed cardiac

794

00:33:36,510 --> 00:33:33,220

disease I wonder where they implanted

795

00:33:39,270 --> 00:33:36,520

the tooth the exhibitor volunteered to

796

00:33:41,640 --> 00:33:39,280

send me a copy of the paper and another

797

00:33:43,400 --> 00:33:41,650

exhibit people were buying small purple

798

00:33:45,720 --> 00:33:43,410

plates for thirty-five dollars each

799

00:33:48,720 --> 00:33:45,730

exhibitor claimed these plates were made

800

00:33:50,880 --> 00:33:48,730

from aluminium and that the atoms of the

801  
00:33:55,020 --> 00:33:50,890  
aluminium had been altered so that the

802  
00:33:57,810 --> 00:33:55,030  
device is in tune or in harmony with the

803  
00:34:00,630 --> 00:33:57,820  
energy of the universe you want to form

804  
00:34:02,940 --> 00:34:00,640  
for this quote positive energy plate and

805  
00:34:06,750 --> 00:34:02,950  
quote promises that the energy can be

806  
00:34:08,909 --> 00:34:06,760  
felt quote by many sensitive people end

807  
00:34:11,639 --> 00:34:08,919  
quote a similar product is claimed to

808  
00:34:14,550 --> 00:34:11,649  
increase the fuel efficiency of your car

809  
00:34:16,830 --> 00:34:14,560  
and ranges in price from 75 to two

810  
00:34:20,040 --> 00:34:16,840  
hundred dollars depending on the size of

811  
00:34:22,770 --> 00:34:20,050  
your car is there anything these magic

812  
00:34:24,149 --> 00:34:22,780  
plates cannot do we also engage the

813  
00:34:27,060 --> 00:34:24,159

people at the neuro linguistic

814

00:34:29,610 --> 00:34:27,070

programming exhibit in an argument about

815

00:34:32,669 --> 00:34:29,620

the lack of empirical basis for their

816

00:34:34,619 --> 00:34:32,679

claims in response I was told to imagine

817

00:34:36,629 --> 00:34:34,629

my favorite color I still cannot

818

00:34:39,300 --> 00:34:36,639

determine how this exercise had a

819

00:34:40,889 --> 00:34:39,310

bearing on the argument perhaps I would

820

00:34:43,079 --> 00:34:40,899

need to pay the

821

00:34:45,740 --> 00:34:43,089

two thousand one hundred and forty

822

00:34:48,629 --> 00:34:45,750

dollars neuro-linguistic programming

823

00:34:51,539 --> 00:34:48,639

practitioner training fee to find out

824

00:34:54,389 --> 00:34:51,549

the highlight of our journey into fast

825

00:34:57,029 --> 00:34:54,399

buck supermarket style enlightenment was

826  
00:34:59,849 --> 00:34:57,039  
our visit to the Infinity empowered

827  
00:35:02,010 --> 00:34:59,859  
water exhibit in the words of our subtle

828  
00:35:06,029 --> 00:35:02,020  
and widely spoken treasurer Richard led

829  
00:35:08,299 --> 00:35:06,039  
quote wait till they feel 125 kilograms

830  
00:35:11,519 --> 00:35:08,309  
of lead coming down on the men quote

831  
00:35:14,220 --> 00:35:11,529  
Richard approached the infinite exhibit

832  
00:35:16,170 --> 00:35:14,230  
declaring quote this has been debunked

833  
00:35:18,630 --> 00:35:16,180  
on national television so what are you

834  
00:35:21,269 --> 00:35:18,640  
doing here then quote the staff may have

835  
00:35:24,180 --> 00:35:21,279  
been confused at first because Richard

836  
00:35:25,740 --> 00:35:24,190  
was cleverly disguised unlike his recent

837  
00:35:27,720 --> 00:35:25,750  
appearance on Channel Seven's Today

838  
00:35:31,319 --> 00:35:27,730

Tonight program which exposed the

839

00:35:34,529 --> 00:35:31,329

infinite empowered water scam this time

840

00:35:36,750 --> 00:35:34,539

Richard was fully clothed however it was

841

00:35:38,789 --> 00:35:36,760

not long before a young girl working at

842

00:35:42,000 --> 00:35:38,799

the exhibit saw through Richards clever

843

00:35:45,120 --> 00:35:42,010

stratagem perhaps she undressed him with

844

00:35:48,180 --> 00:35:45,130

her eyes quote he's one of those

845

00:35:50,940 --> 00:35:48,190

skeptics and quote she cried Richards

846

00:35:53,640 --> 00:35:50,950

cover had been blown another infinity

847

00:35:55,789 --> 00:35:53,650

associate confidently asserted quote we

848

00:35:58,410 --> 00:35:55,799

know all about the skeptics end quote

849

00:36:01,019 --> 00:35:58,420

the crowd that had gathered and all the

850

00:36:03,569 --> 00:36:01,029

excitement began to disperse after all

851  
00:36:06,140 --> 00:36:03,579  
he was just one of those noisy cynical

852  
00:36:09,120 --> 00:36:06,150  
skeptics trying to ruin everyone's fun

853  
00:36:11,099 --> 00:36:09,130  
it was all over as usual these

854  
00:36:13,200 --> 00:36:11,109  
charlatans and the hucksters preyed on

855  
00:36:16,559 --> 00:36:13,210  
wishful thinking and poor judgement and

856  
00:36:18,569 --> 00:36:16,569  
came out the victors after a long day of

857  
00:36:21,480 --> 00:36:18,579  
persistent skepticism in the face of

858  
00:36:23,549 --> 00:36:21,490  
truckloads of piffle we decided to

859  
00:36:25,500 --> 00:36:23,559  
repair to the comforts of a nearby pub

860  
00:36:29,069 --> 00:36:25,510  
and trade stories of our experiences

861  
00:36:31,799 --> 00:36:29,079  
over a few cleansing ales non holistic

862  
00:36:35,130 --> 00:36:31,809  
and that was festival of the wallet by

863  
00:36:37,019 --> 00:36:35,140

Trevor case from volume 18 number two of

864

00:36:39,089 --> 00:36:37,029

the skeptic magazine the journal from

865

00:36:41,930 --> 00:36:39,099

Australian skeptics and you can read

866

00:37:01,839 --> 00:36:41,940

that and many other reports by visiting

867

00:37:06,410 --> 00:37:04,430

how much truth is there to claims of

868

00:37:08,780 --> 00:37:06,420

risk caused by the treatment of beef

869

00:37:10,609 --> 00:37:08,790

cattle with antibiotics I'm Tamra

870

00:37:16,550 --> 00:37:10,619

Robertson and you're hooked up to the

871

00:37:18,710 --> 00:37:16,560

feeding to the feeding tube is the web

872

00:37:21,830 --> 00:37:18,720

video series that brings you the real

873

00:37:24,290 --> 00:37:21,840

facts behind popular food myths food

874

00:37:26,630 --> 00:37:24,300

who is the most pervasive pop

875

00:37:29,150 --> 00:37:26,640

pseudoscience out there right now and it

876  
00:37:31,130 --> 00:37:29,160  
desperately needs debunking each three

877  
00:37:33,920 --> 00:37:31,140  
minute episode is suitable for general

878  
00:37:37,040 --> 00:37:33,930  
audience and is produced by scientists

879  
00:38:00,560 --> 00:37:37,050  
for everyone the feeding tube check it

880  
00:38:02,510 --> 00:38:00,570  
out feeding tube TV over this current

881  
00:38:05,270 --> 00:38:02,520  
weekend the Australian skeptics have

882  
00:38:07,120 --> 00:38:05,280  
their national convention a national

883  
00:38:10,760 --> 00:38:07,130  
conference their national get together

884  
00:38:13,520 --> 00:38:10,770  
the annual get-together in Melbourne and

885  
00:38:16,700 --> 00:38:13,530  
here is the press release from the

886  
00:38:20,150 --> 00:38:16,710  
awards that were given on the Saturday

887  
00:38:24,829 --> 00:38:20,160  
night gala dinner Australian skeptics

888  
00:38:28,130 --> 00:38:24,839

Awards politicians complainers and dodgy

889

00:38:30,770 --> 00:38:28,140

doctorates celebrity winners of the 2016

890

00:38:32,810 --> 00:38:30,780

awards from Australian skeptics include

891

00:38:36,050 --> 00:38:32,820

a victorian government minister a

892

00:38:38,930 --> 00:38:36,060

melbourne académica serial complainer

893

00:38:42,260 --> 00:38:38,940

and a controversial anti-vaccination

894

00:38:44,050 --> 00:38:42,270

'used and her Australian University the

895

00:38:46,970 --> 00:38:44,060

awards were made at a formal dinner on

896

00:38:49,190 --> 00:38:46,980

November the 26th for the skeptics

897

00:38:51,800 --> 00:38:49,200

annual convention which was held in

898

00:38:54,710 --> 00:38:51,810

Melbourne Thor net award for the

899

00:38:57,560 --> 00:38:54,720

promotion of reason the Victorian Health

900

00:39:00,020 --> 00:38:57,570

Minister Jill Hennessy has been awarded

901  
00:39:03,380 --> 00:39:00,030  
the skeptics thor net award for the

902  
00:39:06,560 --> 00:39:03,390  
promotion of reason it commemorates fred

903  
00:39:09,829 --> 00:39:06,570  
bonnet a tasmanian skeptic who died in

904  
00:39:10,180 --> 00:39:09,839  
2009 this award acknowledges a member of

905  
00:39:12,420 --> 00:39:10,190  
the

906  
00:39:15,340 --> 00:39:12,430  
or a public figure who has made a

907  
00:39:17,860 --> 00:39:15,350  
significant contribution to educating or

908  
00:39:20,770 --> 00:39:17,870  
informing the public regarding issues of

909  
00:39:23,050 --> 00:39:20,780  
science and reason quote as every public

910  
00:39:25,570 --> 00:39:23,060  
figure knows especially those in more

911  
00:39:27,760 --> 00:39:25,580  
heated arenas hate mail and vicious

912  
00:39:29,740 --> 00:39:27,770  
trolling on social media are part of the

913  
00:39:31,930 --> 00:39:29,750

job and quote said Iran sir give

914

00:39:34,570 --> 00:39:31,940

president of Australian skeptic zinc

915

00:39:36,880 --> 00:39:34,580

quote death threats and promises of

916

00:39:39,220 --> 00:39:36,890

violence are another matter miss

917

00:39:42,450 --> 00:39:39,230

hennesey has received all of those and

918

00:39:45,610 --> 00:39:42,460

courageously faced down those who

919

00:39:47,650 --> 00:39:45,620

misrepresented and mislead the public in

920

00:39:49,450 --> 00:39:47,660

their promotion of dodgy medical claims

921

00:39:51,720 --> 00:39:49,460

and practices in this case

922

00:39:54,730 --> 00:39:51,730

anti-vaccination ax stand rogue

923

00:39:57,190 --> 00:39:54,740

chiropractors she was as forthright in

924

00:40:00,010 --> 00:39:57,200

her public criticism of claims that are

925

00:40:02,830 --> 00:40:00,020

not supported by science and in the case

926  
00:40:05,950 --> 00:40:02,840  
of chiropractors ignore the directives

927  
00:40:08,020 --> 00:40:05,960  
of their own professional bodies she

928  
00:40:11,080 --> 00:40:08,030  
also went public and revealing the mail

929  
00:40:14,650 --> 00:40:11,090  
she received usually anomalously from

930  
00:40:16,960 --> 00:40:14,660  
those who disagree with her disagree so

931  
00:40:19,120 --> 00:40:16,970  
much as to threaten violence and even

932  
00:40:21,370 --> 00:40:19,130  
death for daring to point to their

933  
00:40:24,970 --> 00:40:21,380  
errors and misleading statements and

934  
00:40:27,040 --> 00:40:24,980  
quote skeptic of the year another

935  
00:40:30,280 --> 00:40:27,050  
positive award from the skeptics is

936  
00:40:32,950 --> 00:40:30,290  
skeptic of the year given to those in

937  
00:40:35,620 --> 00:40:32,960  
the skeptical communities whose efforts

938  
00:40:38,050 --> 00:40:35,630

go above and beyond what can be

939

00:40:40,810 --> 00:40:38,060

reasonably expected of committed

940

00:40:43,330 --> 00:40:40,820

campaigners quote this year the award

941

00:40:46,180 --> 00:40:43,340

was issued jointly to dr. ken harvey and

942

00:40:48,640 --> 00:40:46,190

mal vickers for their continued and

943

00:40:50,980 --> 00:40:48,650

highly effective work in exposing claims

944

00:40:53,500 --> 00:40:50,990

and practices of chiropractors that

945

00:40:56,800 --> 00:40:53,510

mislead and misrepresent the benefits of

946

00:40:58,720 --> 00:40:56,810

their activities and can be dangerous to

947

00:41:01,150 --> 00:40:58,730

members of the public and quoted Ron so

948

00:41:02,860 --> 00:41:01,160

you have said dr. Harvey is adjunct

949

00:41:05,320 --> 00:41:02,870

associate professor at the school of

950

00:41:07,990 --> 00:41:05,330

public health and preventive medicine at

951  
00:41:09,820 --> 00:41:08,000  
Monash University and one of Australia's

952  
00:41:12,550 --> 00:41:09,830  
leading campaigners against non

953  
00:41:15,100 --> 00:41:12,560  
science-based medicines and a critic of

954  
00:41:18,340 --> 00:41:15,110  
pharmaceutical marketing he has been

955  
00:41:21,670 --> 00:41:18,350  
described by the age newspaper as an

956  
00:41:23,980 --> 00:41:21,680  
quote Andy quackery Crusader in quote

957  
00:41:26,770 --> 00:41:23,990  
and by choice magazine as a

958  
00:41:28,540 --> 00:41:26,780  
quote serial complainer unquote mr.

959  
00:41:31,180 --> 00:41:28,550  
Vickers is a longtime member of the

960  
00:41:34,420 --> 00:41:31,190  
Victorian skeptics and an indefatigable

961  
00:41:36,270 --> 00:41:34,430  
net surfer who exposed hundreds of

962  
00:41:39,150 --> 00:41:36,280  
websites of chiropractors who made

963  
00:41:42,520 --> 00:41:39,160

unsubstantiated claims online quote

964

00:41:45,940 --> 00:41:42,530

Harvey and Vickers also exposed the

965

00:41:48,609 --> 00:41:45,950

inadequacies of the professional bodies

966

00:41:51,220 --> 00:41:48,619

that supposedly oversee these

967

00:41:53,859 --> 00:41:51,230

practitioners ignoring misleading claims

968

00:41:56,230 --> 00:41:53,869

and damaging activities and thus

969

00:41:58,600 --> 00:41:56,240

indirectly ignoring the protection of

970

00:42:01,090 --> 00:41:58,610

the public when quote together said

971

00:42:03,790 --> 00:42:01,100

quote no more though thanks to the

972

00:42:06,250 --> 00:42:03,800

efforts of harvin Vickers their work

973

00:42:08,530 --> 00:42:06,260

continues input now the strong

974

00:42:12,070 --> 00:42:08,540

contenders for skeptic of the year were

975

00:42:14,050 --> 00:42:12,080

Ken MacLeod and Peter T&E both past

976  
00:42:15,820 --> 00:42:14,060  
winners of the award who have also

977  
00:42:19,270 --> 00:42:15,830  
campaigned against anti-vaccination

978  
00:42:24,070 --> 00:42:19,280  
nurses and the eventual winner of this

979  
00:42:26,680 --> 00:42:24,080  
here's a bent spoon bent spoon award on

980  
00:42:29,470 --> 00:42:26,690  
that topic the less than positive bent

981  
00:42:31,240 --> 00:42:29,480  
spoon is awarded to the perpetrator of

982  
00:42:33,940 --> 00:42:31,250  
the most preposterous piece of

983  
00:42:36,250 --> 00:42:33,950  
pseudo-scientific or paranormal piffle

984  
00:42:38,859 --> 00:42:36,260  
and over the year and is one of the

985  
00:42:41,650 --> 00:42:38,869  
least desirable prizes in the country

986  
00:42:44,890 --> 00:42:41,660  
past winners have included Pete paleo

987  
00:42:48,220 --> 00:42:44,900  
Evans the CSIRO's new head Larry

988  
00:42:51,370 --> 00:42:48,230

Marshall the ABC the pharmacy Gill of

989

00:42:53,410 --> 00:42:51,380

Australia and a psychic dentist this

990

00:42:56,140 --> 00:42:53,420

year's recipients are anti-vaccination

991

00:42:59,200 --> 00:42:56,150

'used Julie why Lehman her academic

992

00:43:01,599 --> 00:42:59,210

advisor Brian Martin and the social

993

00:43:03,970 --> 00:43:01,609

sciences department of the University of

994

00:43:08,230 --> 00:43:03,980

Wollongong for awarding her doctorate on

995

00:43:11,650 --> 00:43:08,240

the basis of quote a PhD thesis riddled

996

00:43:14,580 --> 00:43:11,660

with errors miss statements poor and

997

00:43:17,800 --> 00:43:14,590

unsupported quote evidence in quit and

998

00:43:20,050 --> 00:43:17,810

conspiratorial thinking men quote quote

999

00:43:23,380 --> 00:43:20,060

why Lehman continues to defend her

1000

00:43:26,080 --> 00:43:23,390

degree with endless diatribes to all and

1001  
00:43:28,480 --> 00:43:26,090  
sundry her University went into defense

1002  
00:43:31,750 --> 00:43:28,490  
mode with a pathetic quote free speech

1003  
00:43:35,280 --> 00:43:31,760  
and quote argument which means free to

1004  
00:43:37,540 --> 00:43:35,290  
present rubbish and be rewarded for it

1005  
00:43:40,540 --> 00:43:37,550  
many within the universities

1006  
00:43:42,670 --> 00:43:40,550  
own staff those who actually know what

1007  
00:43:45,130 --> 00:43:42,680  
they are talking about came out to

1008  
00:43:47,700 --> 00:43:45,140  
criticize their own institution a bad

1009  
00:43:50,860 --> 00:43:47,710  
move by a respected institution an

1010  
00:43:53,500 --> 00:43:50,870  
expected move by a noted anti-science

1011  
00:43:56,860 --> 00:43:53,510  
and anti-vaccination zealot and quote

1012  
00:43:59,620 --> 00:43:56,870  
this honorable mention goes to the ABCs

1013  
00:44:02,440 --> 00:43:59,630

now-defunct catalyst program and former

1014

00:44:04,870 --> 00:44:02,450

reporter dr. Mary and Maisy for an

1015

00:44:07,570 --> 00:44:04,880

inaccurate and alarmist one-sided

1016

00:44:10,000 --> 00:44:07,580

unscientific report on supposed brain

1017

00:44:13,230 --> 00:44:10,010

damage from Wi-Fi technology and for

1018

00:44:16,630 --> 00:44:13,240

being a repeat offender in that respect

1019

00:44:18,490 --> 00:44:16,640

life membership life membership of

1020

00:44:21,070 --> 00:44:18,500

Australian skeptics Inc was conferred on

1021

00:44:23,530 --> 00:44:21,080

past skeptic of the year Loretta Marin

1022

00:44:26,200 --> 00:44:23,540

as well as tireless behind-the-scenes

1023

00:44:29,200 --> 00:44:26,210

workers Margaret kitson Queensland

1024

00:44:32,080 --> 00:44:29,210

skeptics John Turner and Kevin Macdonald

1025

00:44:34,720 --> 00:44:32,090

both hunter skeptics and now here is a

1026  
00:44:36,520 --> 00:44:34,730  
recording of the president of Australian

1027  
00:44:38,710 --> 00:44:36,530  
skeptics and skeptics and reporter Iran

1028  
00:44:47,260 --> 00:44:38,720  
say give announcing the winner of the

1029  
00:44:50,760 --> 00:44:47,270  
bent spoon award so the first award for

1030  
00:44:59,800 --> 00:44:55,990  
this is against Pune War II took Oh

1031  
00:45:03,580 --> 00:44:59,810  
together to bend the spoon but then Tim

1032  
00:45:07,330 --> 00:45:03,590  
broke it it is actually broken but we'll

1033  
00:45:09,070 --> 00:45:07,340  
fix it I don't the bent spoon is awarded

1034  
00:45:11,170 --> 00:45:09,080  
annually to the perpetrator of the most

1035  
00:45:14,740 --> 00:45:11,180  
preposterous piece of paranormal or

1036  
00:45:17,530 --> 00:45:14,750  
scientific people this year's grand

1037  
00:45:18,610 --> 00:45:17,540  
spoon actually before I speak about this

1038  
00:45:21,250 --> 00:45:18,620

year's thanks but i just want to mention

1039

00:45:22,780 --> 00:45:21,260

and give a dishonorable mention to

1040

00:45:26,560 --> 00:45:22,790

somebody who people in the bent spoon

1041

00:45:30,030 --> 00:45:26,570

and that is a catalyst ABC catalyst and

1042

00:45:34,240 --> 00:45:30,040

specifically specifically reporter

1043

00:45:37,060 --> 00:45:34,250

merienda messy um I know she has some

1044

00:45:40,020 --> 00:45:37,070

friends in the audience here but she's

1045

00:45:42,670 --> 00:45:40,030

screwed up royally more than once and

1046

00:45:46,150 --> 00:45:42,680

she could easily have won the award this

1047

00:45:48,430 --> 00:45:46,160

year however this year's this year's

1048

00:45:50,620 --> 00:45:48,440

been spoon is awarded jointly to an

1049

00:45:53,170 --> 00:45:50,630

individual was worked Isley tell

1050

00:45:55,120 --> 00:45:53,180

tirelessly for years to become one of

1051

00:45:58,810 --> 00:45:55,130

Australia's leading public health

1052

00:46:01,030 --> 00:45:58,820

menaces a person was a person was aided

1053

00:46:07,900 --> 00:46:01,040

and abetted her and the organization who

1054

00:46:10,500 --> 00:46:07,910

facilitated them Jimmy Whelan is a

1055

00:46:13,390 --> 00:46:10,510

dedicated and aggressive aunty back from

1056

00:46:16,930 --> 00:46:13,400

she has been promoting her views often

1057

00:46:18,580 --> 00:46:16,940

in particularly vile ways for years last

1058

00:46:19,960 --> 00:46:18,590

year she was awarded a PhD from the

1059

00:46:22,130 --> 00:46:19,970

University from the Faculty of Social

1060

00:46:25,350 --> 00:46:22,140

Sciences for reversed

1061

00:46:26,970 --> 00:46:25,360

the topic of the thesis was a critical

1062

00:46:29,490 --> 00:46:26,980

analysis of the Australian Government's

1063

00:46:32,250 --> 00:46:29,500

rationale for its vaccination policy and

1064

00:46:34,530 --> 00:46:32,260

as expected it concluded that the

1065

00:46:39,870 --> 00:46:34,540

government policy of promoting vaccines

1066

00:46:41,460 --> 00:46:39,880

is flawed also as expected the thesis is

1067

00:46:43,470 --> 00:46:41,470

full of light which the presentations

1068

00:46:45,720 --> 00:46:43,480

cherry-picking claims and claims without

1069

00:46:48,960 --> 00:46:45,730

evidence and a lots of conspiratorial

1070

00:46:50,520 --> 00:46:48,970

thinking that alone would make kuala

1071

00:46:52,500 --> 00:46:50,530

minh a strong contender for the bed

1072

00:46:55,590 --> 00:46:52,510

spoon but she has furthered her case for

1073

00:46:58,070 --> 00:46:55,600

this prestigious award by continuously

1074

00:47:00,000 --> 00:46:58,080

harassing her detractors many of them

1075

00:47:01,800 --> 00:47:00,010

scientists at the University of

1076

00:47:05,430 --> 00:47:01,810

Wollongong with a series of bizarre

1077

00:47:08,820 --> 00:47:05,440

emails but why Lehman could not have

1078

00:47:11,850 --> 00:47:08,830

done that alone her supervisor Brian

1079

00:47:13,440 --> 00:47:11,860

Martin a longtime supporter of a

1080

00:47:18,330 --> 00:47:13,450

longtime supporter of the

1081

00:47:20,370 --> 00:47:18,340

anti-vaccination and the Faculty of

1082

00:47:22,530 --> 00:47:20,380

Social Sciences that allowed such a

1083

00:47:24,780 --> 00:47:22,540

flawed in damaging PhD to go through

1084

00:47:34,790 --> 00:47:24,790

must share the responsibility and

1085

00:47:40,050 --> 00:47:38,460

so actually what I think if Richard were

1086

00:47:43,230 --> 00:47:40,060

here you will tell it'll do a raspberry

1087

00:47:50,400 --> 00:47:43,240

for better yeah they definitely deserve

1088

00:47:52,530 --> 00:47:50,410

her aspirin okay congratulations to the

1089

00:48:02,850 --> 00:47:52,540

worthy winners of this year's awards

1090

00:48:04,500 --> 00:48:02,860

from Australian skeptics yeah aight guys

1091

00:48:06,600 --> 00:48:04,510

i was talking to Richard Saunders isn't

1092

00:48:08,880 --> 00:48:06,610

it all right he said if we record a

1093

00:48:11,070 --> 00:48:08,890

trailer for our podcast skeptics with a

1094

00:48:12,900 --> 00:48:11,080

que he'd play it on there unless you're

1095

00:48:13,859 --> 00:48:12,910

nice nice oven that's very generous it's

1096

00:48:15,960 --> 00:48:13,869

pretty good i'm not sure what we could

1097

00:48:17,700 --> 00:48:15,970

do though I mean well suppose you tell

1098

00:48:20,550 --> 00:48:17,710

people shows about but it's basic as

1099

00:48:22,170 --> 00:48:20,560

this yeah but yeah but you know we talk

1100

00:48:23,940 --> 00:48:22,180

about science and skepticism and things

1101

00:48:25,890 --> 00:48:23,950

that's true as fuzzy you mention the

1102

00:48:27,390 --> 00:48:25,900

website address what merseyside skeptics

1103

00:48:29,430 --> 00:48:27,400

talk don't you care yeah yeah I just

1104

00:48:31,830 --> 00:48:29,440

exertion itunes oh and then we could end

1105

00:48:35,190 --> 00:48:31,840

with like a big song like the skeptics

1106

00:48:46,180 --> 00:48:35,200

with okay god no no no no don't don't do

1107

00:48:51,170 --> 00:48:48,740

thank you for listening to the skeptics

1108

00:48:52,910 --> 00:48:51,180

are now New Zealand people I hope to

1109

00:48:56,240 --> 00:48:52,920

meet you in person at the New Zealand

1110

00:48:58,490 --> 00:48:56,250

skeptics national conference this coming

1111

00:49:00,470 --> 00:48:58,500

weekend goodness me that's almost it's

1112

00:49:02,900 --> 00:49:00,480

almost time for me to pack my bags i'm

1113

00:49:05,780 --> 00:49:02,910

going to be packing spoons i'm going to

1114

00:49:08,750 --> 00:49:05,790

be packing divining rods for divining

1115

00:49:11,600 --> 00:49:08,760

tests bit of fun there what else I'll

1116

00:49:17,330 --> 00:49:11,610

pack a power balance band to demonstrate

1117

00:49:19,970 --> 00:49:17,340

I'll pack a premium wine card that might

1118

00:49:24,170 --> 00:49:19,980

be a lot of fun sure to make that wine

1119

00:49:27,260 --> 00:49:24,180

taste better hmm I head across the

1120

00:49:29,900 --> 00:49:27,270

Tasman to visit our friends and family

1121

00:49:32,120 --> 00:49:29,910

and colleagues in New Zealand to be part

1122

00:49:34,370 --> 00:49:32,130

of the new zealand skeptics conference I

1123

00:49:36,260 --> 00:49:34,380

am so much looking forward to it'll be

1124

00:49:38,150 --> 00:49:36,270

great to address the New Zealand

1125

00:49:40,820 --> 00:49:38,160

skeptics and hopefully be very

1126  
00:49:42,560 --> 00:49:40,830  
entertaining hopefully and of course

1127  
00:49:45,110 --> 00:49:42,570  
i'll be doing interviews there for you

1128  
00:49:48,080 --> 00:49:45,120  
to enjoy in the coming weeks for more

1129  
00:49:52,970 --> 00:49:48,090  
information head to conference dot

1130  
00:49:55,040 --> 00:49:52,980  
skeptics dot n z and congratulations to

1131  
00:49:58,070 --> 00:49:55,050  
the winners of the australian skeptics

1132  
00:49:59,780 --> 00:49:58,080  
awards you just heard and if you want to

1133  
00:50:01,640 --> 00:49:59,790  
nominate somebody for the bent spoon for

1134  
00:50:04,850 --> 00:50:01,650  
next year i think you can do that

1135  
00:50:07,280 --> 00:50:04,860  
probably in the next few months on the

1136  
00:50:10,010 --> 00:50:07,290  
australian skeptics website but for now

1137  
00:50:11,240 --> 00:50:10,020  
you can consider you consider if you're

1138  
00:50:14,750 --> 00:50:11,250

in australia you consider what

1139

00:50:17,870 --> 00:50:14,760

organization or individual or company or

1140

00:50:20,690 --> 00:50:17,880

product would be worthy of a bent spoon

1141

00:50:23,870 --> 00:50:20,700

now as I'll be flying to New Zealand in

1142

00:50:26,240 --> 00:50:23,880

not so many days I think I might even

1143

00:50:29,210 --> 00:50:26,250

aim to put the skeptic zone out a little

1144

00:50:32,480 --> 00:50:29,220

early next week we'll see we'll see ah

1145

00:50:34,550 --> 00:50:32,490

or I'll try to UM at least edit it all

1146

00:50:37,250 --> 00:50:34,560

together because I'll be quite busy

1147

00:50:39,470 --> 00:50:37,260

doing my my talks in my our trip to New

1148

00:50:42,350 --> 00:50:39,480

Zealand stay tuned look if the show

1149

00:50:45,200 --> 00:50:42,360

comes out unexpectedly early then you'll

1150

00:50:47,210 --> 00:50:45,210

understand why if not it might come out

1151  
00:50:48,380 --> 00:50:47,220  
more or less on time and who knows I

1152  
00:50:50,510 --> 00:50:48,390  
might even have a clip from New Zealand

1153  
00:50:52,720 --> 00:50:50,520  
already although that's a bit tricky to

1154  
00:50:56,360 --> 00:50:52,730  
do on the run but I've done it before

1155  
00:50:57,319 --> 00:50:56,370  
we'll see we'll see but for this week

1156  
00:50:59,359 --> 00:50:57,329  
with a little shadow

1157  
00:51:01,459 --> 00:50:59,369  
to Hugo and Charlie hi guys haven't

1158  
00:51:03,739 --> 00:51:01,469  
forgotten about you this is Richard

1159  
00:51:10,130 --> 00:51:03,749  
Saunders signing off from Sydney

1160  
00:51:12,620 --> 00:51:10,140  
Australia you've been listening to the

1161  
00:51:16,459 --> 00:51:12,630  
skeptics own podcast visit our website

1162  
00:51:19,759 --> 00:51:16,469  
at wwc a petting zoo TV for contacts an

1163  
00:51:22,910 --> 00:51:19,769

archive of all episodes since 2008 and

1164

00:51:24,979 --> 00:51:22,920

our online store please support the

1165

00:51:28,339 --> 00:51:24,989

skeptic zone by following us on twitter

1166

00:51:31,819 --> 00:51:28,349

at skeptic zone liking us on facebook

1167

00:51:33,349 --> 00:51:31,829

and leaving a review on iTunes you can

1168

00:51:37,190 --> 00:51:33,359

also show your support by subscribing

1169

00:51:40,219 --> 00:51:37,200

via paypal for as little as 99 cents a

1170

00:51:41,870 --> 00:51:40,229

week the skeptic zone is an independent

1171

00:51:44,299 --> 00:51:41,880

production the views and opinions

1172

00:51:45,920 --> 00:51:44,309

expressed on the skeptic zone and not

1173

00:51:48,769 --> 00:51:45,930

necessarily those of Australian