

1
00:00:05,939 --> 00:00:13,679
welcome to the skeptic zone the podcast

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

3
00:00:23,230 --> 00:00:30,849
yes it's the skeptics are an episode

4
00:00:25,759 --> 00:00:35,390
number 174 the twenty first of January

5
00:00:30,849 --> 00:00:41,448
2012 Richard Saunders here with you from

6
00:00:35,390 --> 00:00:44,480
a very soggy gray drizzly rainy look up

7
00:00:41,448 --> 00:00:47,349
your thesaurus they here in the Bay Area

8
00:00:44,479 --> 00:00:50,209
in California the San Francisco Bay Area

9
00:00:47,350 --> 00:00:52,429
I'm in the USA for a couple of weeks to

10
00:00:50,210 --> 00:00:55,280
visit family and friends and hopefully

11
00:00:52,429 --> 00:00:59,929
score some nice reports and interviews

12
00:00:55,280 --> 00:01:04,129
for the skeptic zone but on this wig

13
00:00:59,929 --> 00:01:07,219
show before i left australia I caught up

14
00:01:04,129 --> 00:01:09,170
with Ian Bryce the chief investigator of

15
00:01:07,219 --> 00:01:13,188
Australian skeptics now he's been

16
00:01:09,170 --> 00:01:16,728
looking into a new sort of claim about

17
00:01:13,188 --> 00:01:19,188
cold fusion I yes remember cold fusion

18
00:01:16,728 --> 00:01:21,319
way back in the 80s I think it was well

19
00:01:19,188 --> 00:01:23,508
it seems that there is a ax and now the

20
00:01:21,319 --> 00:01:27,049
cold fusion device doing the rounds as

21
00:01:23,509 --> 00:01:30,849
it were this is the device called the

22
00:01:27,049 --> 00:01:35,239
e-cat ecat invented by somebody called

23
00:01:30,849 --> 00:01:39,469
andrea rossi in italy now there's an

24
00:01:35,239 --> 00:01:41,030
australian distributor hoping to tell us

25
00:01:39,469 --> 00:01:44,150
all the benefits of this wonderful

26
00:01:41,030 --> 00:01:45,769
device and Ian Bryce on behalf of dick

27
00:01:44,150 --> 00:01:48,469
smith who is a patron of Australian

28
00:01:45,769 --> 00:01:51,140
skeptics went up to the little town of

29

00:01:48,469 --> 00:01:53,870
mullein Bimby up in northern New South

30
00:01:51,140 --> 00:01:57,950
Wales to attend to talk all about this

31
00:01:53,870 --> 00:02:00,549
amazing device what did Ian discover to

32
00:01:57,950 --> 00:02:03,400
find out soon at the top of the show and

33
00:02:00,549 --> 00:02:07,940
following that we have a radio interview

34
00:02:03,400 --> 00:02:11,269
from 4 BC radio 4 BC in Queensland where

35
00:02:07,939 --> 00:02:14,419
the hosts interviewed very dear friend

36
00:02:11,269 --> 00:02:16,610
of the skeptic stone Loretta Marin also

37
00:02:14,419 --> 00:02:18,798
known as the jellybean lady now Loretta

38
00:02:16,610 --> 00:02:22,700
is the only person in history of

39
00:02:18,799 --> 00:02:25,310
Australian skeptics sub / 31 years who

40
00:02:22,699 --> 00:02:32,629
has been awarded skeptic of the Year

41
00:02:25,310 --> 00:02:34,159
twice yes in 2007 and 2011 and you'll

42
00:02:32,629 --> 00:02:37,280
find out why we

43
00:02:34,159 --> 00:02:43,069

loretta in such high regard during the

44

00:02:37,280 --> 00:02:44,390

interview on radio 4 BC I don't know if

45

00:02:43,069 --> 00:02:46,370

you can hear the rain falling outside

46

00:02:44,389 --> 00:02:49,039

but sort of trickling down the gutter

47

00:02:46,370 --> 00:02:51,680

and big drops in this very cold outside

48

00:02:49,039 --> 00:02:54,919

nice and crispy cold I'm just flown out

49

00:02:51,680 --> 00:03:01,060

of Sydney of course which is muggy muggy

50

00:02:54,919 --> 00:03:04,179

humid and hot now it's cold and wet here

51

00:03:01,060 --> 00:03:07,189

are the joys of international travel and

52

00:03:04,180 --> 00:03:09,590

speaking of traveling the skeptic zones

53

00:03:07,189 --> 00:03:13,490

very own dr. Richie will be travelling

54

00:03:09,590 --> 00:03:15,770

to Canberra Canberra the capital of

55

00:03:13,490 --> 00:03:18,379

Australia and she'll be there on

56

00:03:15,770 --> 00:03:20,870

Wednesday the fifteenth of february to

57

00:03:18,379 --> 00:03:23,810

give a talk at the optus lecture theatre

58
00:03:20,870 --> 00:03:27,200
which is at the CSIRO discovery science

59
00:03:23,810 --> 00:03:29,420
center clooney's ross street and in

60
00:03:27,199 --> 00:03:31,519
canberra she's going to be giving a talk

61
00:03:29,419 --> 00:03:35,689
which is free by the way free admission

62
00:03:31,520 --> 00:03:37,610
free free free diagnosis by dr. google

63
00:03:35,689 --> 00:03:41,169
that date again is Wednesday the

64
00:03:37,610 --> 00:03:46,480
fifteenth of february starting at 6pm

65
00:03:41,169 --> 00:03:48,979
now if you go to ww skeptics on TV and

66
00:03:46,479 --> 00:03:51,649
click the link on the show notes you can

67
00:03:48,979 --> 00:03:54,739
find out more about Reggie's visit to

68
00:03:51,650 --> 00:03:59,060
Canberra if you're in the AC T or near

69
00:03:54,740 --> 00:04:02,750
it why not go along and see dr. H E and

70
00:03:59,060 --> 00:04:04,969
hit her talk in person and you can also

71
00:04:02,750 --> 00:04:08,229
visit the website of Canberra skeptics

72
00:04:04,969 --> 00:04:14,900
which is pretty easy to remember ww

73
00:04:08,229 --> 00:04:16,699
Canberra skeptic so are GE you thank you

74
00:04:14,900 --> 00:04:18,798
to those listeners who in the past week

75
00:04:16,699 --> 00:04:22,729
have been chipping in to help our dear

76
00:04:18,798 --> 00:04:25,639
friend and report am a hard get to the

77
00:04:22,730 --> 00:04:27,470
amazing meeting in Las Vegas I'm just

78
00:04:25,639 --> 00:04:30,500
looking on the website now looking at

79
00:04:27,470 --> 00:04:32,510
Maynard's thermometer the total of the

80
00:04:30,500 --> 00:04:35,029
money raised and yes it's sort of

81
00:04:32,509 --> 00:04:38,589
creeping up towards her nor must be

82
00:04:35,029 --> 00:04:41,329
nearly 1500 by now of course our goal is

83
00:04:38,589 --> 00:04:43,549
2500 so we're getting there we are

84
00:04:41,329 --> 00:04:45,139
definitely getting there and I can't

85
00:04:43,550 --> 00:04:47,300
wait to hear the reports that Maynard

86

00:04:45,139 --> 00:04:48,089
will be able to bring us all when he

87
00:04:47,300 --> 00:04:50,720
gets to Lhasa

88
00:04:48,089 --> 00:04:53,399
yes we're flying may nod to Las Vegas

89
00:04:50,720 --> 00:04:56,330
yeah I've never flown somebody's Las

90
00:04:53,399 --> 00:04:59,239
Vegas before I hope I get to go to

91
00:04:56,329 --> 00:05:02,639
anyway if you feel like helping out

92
00:04:59,240 --> 00:05:05,970
please do please do i'm sure we'll get

93
00:05:02,639 --> 00:05:07,620
da we'll get to how goal and you can

94
00:05:05,970 --> 00:05:10,830
visit the skeptics on website of course

95
00:05:07,620 --> 00:05:13,800
and click the donate button for me nod

96
00:05:10,829 --> 00:05:16,800
and i must say thank you to our dr. Phil

97
00:05:13,800 --> 00:05:20,040
Plait who was on last week's show he

98
00:05:16,800 --> 00:05:22,978
helped us set a new record for the

99
00:05:20,040 --> 00:05:27,720
skeptic zone his show which was episode

100
00:05:22,978 --> 00:05:30,899

number 169 has almost twice as many

101

00:05:27,720 --> 00:05:33,690

downloads as our previous record Thank

102

00:05:30,899 --> 00:05:36,209

You Phil Plait and welcome to all the

103

00:05:33,689 --> 00:05:37,949

new listeners to the skeptic zone we've

104

00:05:36,209 --> 00:05:40,288

had so many guests over the three years

105

00:05:37,949 --> 00:05:42,180

or so the skeptic zones been going so

106

00:05:40,288 --> 00:05:45,149

many interesting reports but you can see

107

00:05:42,180 --> 00:05:49,228

a huge list of those at skeptics own TV

108

00:05:45,149 --> 00:05:51,870

click the download comments link and you

109

00:05:49,228 --> 00:05:56,490

can see a list of all the past skeptic

110

00:05:51,870 --> 00:05:59,490

zone episodes waiting waiting for you to

111

00:05:56,490 --> 00:06:04,879

hear them well as I hear more rain out

112

00:05:59,490 --> 00:06:08,310

the window let me have a look oh yes

113

00:06:04,879 --> 00:06:09,930

gray overcast David there you go I'm

114

00:06:08,310 --> 00:06:13,250

going to run upstairs i'm going to have

115
00:06:09,930 --> 00:06:13,250
a nice hot drink of

116
00:06:15,100 --> 00:06:19,930
what can I have a hot drink of what what

117
00:06:18,579 --> 00:06:24,069
do you have a hot drink off when you're

118
00:06:19,930 --> 00:06:27,699
in in san francisco bay area mmm what

119
00:06:24,069 --> 00:06:31,439
the hell hot chocolate oh yes while you

120
00:06:27,699 --> 00:06:31,439
enjoy the skeptics out

121
00:06:49,319 --> 00:06:54,129
now listeners a couple of weeks ago you

122
00:06:51,910 --> 00:06:56,349
may well remember I went for a walk with

123
00:06:54,129 --> 00:06:58,779
my good friend and chief investigator on

124
00:06:56,348 --> 00:07:01,418
from the Australian skeptics Ian Bryce

125
00:06:58,779 --> 00:07:04,029
and we're walking the dogs in fact and

126
00:07:01,418 --> 00:07:06,339
we were discussing the interesting

127
00:07:04,029 --> 00:07:08,888
things regarding negatively positive

128
00:07:06,339 --> 00:07:11,319
ions well Ian Bryce is back with us

129
00:07:08,889 --> 00:07:14,168
today to discuss more interesting things

130
00:07:11,319 --> 00:07:19,180
this time the the hope and the promise

131
00:07:14,168 --> 00:07:23,109
of cheap and hardly polluting type

132
00:07:19,180 --> 00:07:24,759
energy hello Ian hello Richard now you

133
00:07:23,110 --> 00:07:27,009
went on a mission you want to on a

134
00:07:24,759 --> 00:07:28,720
mission for our founder mr. dick smith

135
00:07:27,009 --> 00:07:30,250
who was very famous here in Australia

136
00:07:28,720 --> 00:07:31,840
for the founding of the Australian

137
00:07:30,250 --> 00:07:34,839
skeptics and the dick smith electronics

138
00:07:31,839 --> 00:07:36,189
chain and Dick Smith foods and he's

139
00:07:34,839 --> 00:07:39,369
flown around the world in a helicopter

140
00:07:36,189 --> 00:07:41,949
and had many records with his

141
00:07:39,370 --> 00:07:47,649
adventuring but he was approached I

142
00:07:41,949 --> 00:07:50,379
believe to fund a new type of engine yes

143

00:07:47,649 --> 00:07:52,629
dicks known for his support for

144
00:07:50,379 --> 00:07:54,908
environmental and humanitarian projects

145
00:07:52,629 --> 00:07:56,680
so of course a new form of energy that

146
00:07:54,908 --> 00:08:00,968
was antifreeze from climate change would

147
00:07:56,680 --> 00:08:03,400
be a most amazing thing so your dogs are

148
00:08:00,968 --> 00:08:07,870
green they're outside right yes pardon

149
00:08:03,399 --> 00:08:10,779
the dogs so in this case dick was a bit

150
00:08:07,870 --> 00:08:12,968
surprised to be approached by this by

151
00:08:10,779 --> 00:08:15,399
this representing representative looking

152
00:08:12,968 --> 00:08:18,250
for money for Rossi's so-called ecats

153
00:08:15,399 --> 00:08:22,269
machine are you cat is EC 80 right

154
00:08:18,250 --> 00:08:23,800
energy catalyzer energy is now yes you

155
00:08:22,269 --> 00:08:27,189
can easily find that on the web if you

156
00:08:23,800 --> 00:08:29,199
do a Google and the main difference from

157
00:08:27,189 --> 00:08:31,180

all the other things that the skeptics

158

00:08:29,199 --> 00:08:33,250

have investigated is that there's no

159

00:08:31,180 --> 00:08:34,899

less than eight scientists who have come

160

00:08:33,250 --> 00:08:36,940

out giving some support for this device

161

00:08:34,899 --> 00:08:40,049

where's most of the other things we've

162

00:08:36,940 --> 00:08:43,630

investigated like homeopathy and the

163

00:08:40,049 --> 00:08:45,370

anti-vaccination group and the our band

164

00:08:43,629 --> 00:08:47,649

bracelets yes you don't find any

165

00:08:45,370 --> 00:08:49,509

scientific support at all right so given

166

00:08:47,649 --> 00:08:50,379

that there's some scientific support for

167

00:08:49,509 --> 00:08:53,110

this

168

00:08:50,379 --> 00:08:55,779

dick thought the skeptic should look

169

00:08:53,110 --> 00:08:58,149

into it so I went along to them the

170

00:08:55,779 --> 00:09:00,699

meeting we meeting in northern Australia

171

00:08:58,149 --> 00:09:03,389

or northern New South Wales in fact just

172
00:09:00,700 --> 00:09:06,009
a few days ago you flew up to the little

173
00:09:03,389 --> 00:09:08,879
little township of Marlon bimby

174
00:09:06,009 --> 00:09:12,879
mullumbimby which is near byron bay and

175
00:09:08,879 --> 00:09:14,980
just as a side note i grew up in milan

176
00:09:12,879 --> 00:09:18,669
min herre about how about that i spent

177
00:09:14,980 --> 00:09:23,139
most of my school years in mummys on l

178
00:09:18,669 --> 00:09:24,909
remember that very well which is very

179
00:09:23,139 --> 00:09:26,470
strange when I think about it because it

180
00:09:24,909 --> 00:09:28,389
really is just a little country town

181
00:09:26,470 --> 00:09:30,129
it's a lovely little country town but

182
00:09:28,389 --> 00:09:33,129
it's just a little country town it's not

183
00:09:30,129 --> 00:09:36,580
the place i would think that um would be

184
00:09:33,129 --> 00:09:38,620
used to drop interest in some type of

185
00:09:36,580 --> 00:09:41,280
technology that could potentially change

186
00:09:38,620 --> 00:09:43,990
the world i guess but what they have is

187
00:09:41,279 --> 00:09:46,629
retired money is surprisingly large

188
00:09:43,990 --> 00:09:48,820
number of wealthy people there who have

189
00:09:46,629 --> 00:09:52,059
written who have retired or prepared

190
00:09:48,820 --> 00:09:53,650
prefer a living style that's away from

191
00:09:52,059 --> 00:09:57,099
the big smoke among the beautiful

192
00:09:53,649 --> 00:09:59,620
rolling hills and hinterland there yes

193
00:09:57,100 --> 00:10:02,560
yes and there have been quite a few

194
00:09:59,620 --> 00:10:05,710
different schemes and scams associated

195
00:10:02,559 --> 00:10:08,529
with the area and it's well known for

196
00:10:05,710 --> 00:10:10,030
people who politely you could say people

197
00:10:08,529 --> 00:10:11,829
who feel very much in tune with the

198
00:10:10,029 --> 00:10:13,449
earth in fact I got some brochures when

199
00:10:11,830 --> 00:10:15,040
I was up there there's the fist deal

200

00:10:13,450 --> 00:10:17,440
with earth frequencies coming up

201
00:10:15,039 --> 00:10:18,939
relative frequency so ask them what that

202
00:10:17,440 --> 00:10:22,150
was a better man referred me to Nikola

203
00:10:18,940 --> 00:10:25,300
Tesla his experiments report yes rican

204
00:10:22,149 --> 00:10:27,370
so he'd be rotating in his grave if he

205
00:10:25,299 --> 00:10:31,029
knew all the time people bring up his

206
00:10:27,370 --> 00:10:33,570
name but well I remember a dead area of

207
00:10:31,029 --> 00:10:37,419
Australia northern New South Wales um

208
00:10:33,570 --> 00:10:39,670
it's it was a big center in the in the

209
00:10:37,419 --> 00:10:41,979
early 70s especially for the hippie

210
00:10:39,669 --> 00:10:44,679
culture I remain and still is and still

211
00:10:41,980 --> 00:10:48,190
is yes yes in fact my host drove me

212
00:10:44,679 --> 00:10:50,079
around in a 1988 car painted with

213
00:10:48,190 --> 00:10:53,410
flowers and love and peace times they

214
00:10:50,080 --> 00:10:54,790

fancy surviving from those days well and

215

00:10:53,409 --> 00:10:58,089

we've got a good idea of the demographic

216

00:10:54,789 --> 00:10:59,740

there I I gave an outline of the

217

00:10:58,090 --> 00:11:00,910

skeptics when when I got to give my

218

00:10:59,740 --> 00:11:03,009

presentation and the things they've

219

00:11:00,909 --> 00:11:04,600

investigated recently we mentioned that

220

00:11:03,009 --> 00:11:06,189

power band and those things and when I

221

00:11:04,600 --> 00:11:07,480

got to the anti-vaccination the

222

00:11:06,190 --> 00:11:08,590

Australian vaccination that rep it

223

00:11:07,480 --> 00:11:10,139

really anti-vaccination should have

224

00:11:08,590 --> 00:11:12,850

heard the hurts from the audience and

225

00:11:10,139 --> 00:11:15,730

someone walked out what Evans have been

226

00:11:12,850 --> 00:11:17,200

able to tolerate that so you were flown

227

00:11:15,730 --> 00:11:19,180

up there on behalf of Dick Smith to

228

00:11:17,200 --> 00:11:23,259

check out the bona fide ease of this

229
00:11:19,179 --> 00:11:25,449
this ecad and you were given the chance

230
00:11:23,259 --> 00:11:27,759
to actually address the the meeting

231
00:11:25,450 --> 00:11:29,440
which is I think that was a very good

232
00:11:27,759 --> 00:11:31,299
that you were given that chance I must

233
00:11:29,440 --> 00:11:33,370
say yes that was quite courteous of my

234
00:11:31,299 --> 00:11:35,500
host the Australian the prospective

235
00:11:33,370 --> 00:11:39,730
representative to allow me to share the

236
00:11:35,500 --> 00:11:42,370
table with him and and give my point of

237
00:11:39,730 --> 00:11:44,470
view it's quite open although he did get

238
00:11:42,370 --> 00:11:46,210
a bit worried as it went on and well I

239
00:11:44,470 --> 00:11:47,920
was just about to come to that as it

240
00:11:46,210 --> 00:11:52,269
happened and I've looked at your notes

241
00:11:47,919 --> 00:11:54,849
from the presentation you gave maybe he

242
00:11:52,269 --> 00:11:57,819
would have been somewhat disappointed by

243
00:11:54,850 --> 00:12:01,389
your presentation because it wasn't

244
00:11:57,820 --> 00:12:03,070
glowing was it that's right yes he he

245
00:12:01,389 --> 00:12:04,569
and a lot of his colleagues were saying

246
00:12:03,070 --> 00:12:05,560
things like come on just investment what

247
00:12:04,570 --> 00:12:07,990
he worried about we've got at least

248
00:12:05,559 --> 00:12:09,789
scientists saying it's okay we're over

249
00:12:07,990 --> 00:12:13,360
that we want to work out the finances

250
00:12:09,789 --> 00:12:16,750
yeah and this guy had a quite a scheme

251
00:12:13,360 --> 00:12:18,039
set up for his nonprofit organization

252
00:12:16,750 --> 00:12:20,590
which seem to be handling a lot of money

253
00:12:18,039 --> 00:12:23,740
in his business plan for a nonprofit

254
00:12:20,590 --> 00:12:25,060
organization and there were profits to

255
00:12:23,740 --> 00:12:27,879
be made left right and centre we were

256
00:12:25,059 --> 00:12:30,579
assured so I put the bit of a break on

257

00:12:27,879 --> 00:12:31,960
it and and when it was my time to speak

258
00:12:30,580 --> 00:12:33,580
I said we'll hang on a bit let's slow

259
00:12:31,960 --> 00:12:35,560
down and take a step backward from all

260
00:12:33,580 --> 00:12:38,139
this let's firstly find out whether it's

261
00:12:35,559 --> 00:12:39,489
true yes before we start working out the

262
00:12:38,139 --> 00:12:42,759
business plan and the investment

263
00:12:39,490 --> 00:12:44,769
strategy if this engine is true as

264
00:12:42,759 --> 00:12:47,639
claimed he and it we're and we're not

265
00:12:44,769 --> 00:12:50,169
joking about here it would seriously

266
00:12:47,639 --> 00:12:52,240
revolutionize our society wouldn't it it

267
00:12:50,169 --> 00:12:56,139
totally would a totally new field of

268
00:12:52,240 --> 00:12:58,440
physics and energy production climate

269
00:12:56,139 --> 00:13:00,699
change would be solved overnight and

270
00:12:58,440 --> 00:13:03,580
everything standard could go on climbing

271
00:13:00,700 --> 00:13:06,100

yes we produce more goods and recycle

272

00:13:03,580 --> 00:13:08,830

more goods very easily yeah so it really

273

00:13:06,100 --> 00:13:11,019

is a bold claim that these people will

274

00:13:08,830 --> 00:13:13,629

make yes yes on the other hand so that's

275

00:13:11,019 --> 00:13:15,250

one reason that dick wanted to invest in

276

00:13:13,629 --> 00:13:16,720

it if it's going to be of such benefit

277

00:13:15,250 --> 00:13:18,669

to mankind we'd all like to be

278

00:13:16,720 --> 00:13:20,528

of it but the other side of the coin was

279

00:13:18,669 --> 00:13:22,899

that if it turns out to be a scam to be

280

00:13:20,528 --> 00:13:24,309

false and we don't want people wasting

281

00:13:22,899 --> 00:13:26,259

their money on it that money could

282

00:13:24,309 --> 00:13:29,138

otherwise been invested in things that

283

00:13:26,259 --> 00:13:32,019

are known to benefit humanity and save

284

00:13:29,139 --> 00:13:35,409

the climate for example good old bog

285

00:13:32,019 --> 00:13:36,818

standard solar power good yeah if

286
00:13:35,409 --> 00:13:39,688
there's a replicator ways of energy

287
00:13:36,818 --> 00:13:42,578
storage overnight you say but more

288
00:13:39,688 --> 00:13:44,469
advancement of the of the technologies

289
00:13:42,578 --> 00:13:46,719
involved in solar energy so year by year

290
00:13:44,470 --> 00:13:49,660
I imagine where winking better

291
00:13:46,720 --> 00:13:51,278
efficiency out of these cells but if

292
00:13:49,659 --> 00:13:53,230
you're going to spend millions on this

293
00:13:51,278 --> 00:13:54,639
scheme that turns out to be wasted to be

294
00:13:53,230 --> 00:13:56,649
better off spending the millions

295
00:13:54,639 --> 00:13:59,799
unimproved what's going to work yeah

296
00:13:56,649 --> 00:14:02,198
yeah so these motivations they dick to

297
00:13:59,799 --> 00:14:03,399
ask me to go and assess the situation up

298
00:14:02,198 --> 00:14:06,849
there and I please they've got the

299
00:14:03,399 --> 00:14:08,500
chance to address them as well so I've

300
00:14:06,850 --> 00:14:11,350
developed a little scientific tool

301
00:14:08,500 --> 00:14:13,720
called the three-legged stool test yes I

302
00:14:11,350 --> 00:14:15,040
shall use this is a I made a little note

303
00:14:13,720 --> 00:14:20,199
to ask you about that because I do

304
00:14:15,039 --> 00:14:22,480
remember how many years ago in 2004 i

305
00:14:20,198 --> 00:14:24,429
think it was at a convention that in

306
00:14:22,480 --> 00:14:26,319
here in sydney you you spoke about the

307
00:14:24,429 --> 00:14:27,789
three-legged stool and i remember

308
00:14:26,318 --> 00:14:30,878
thinking at the time it was a very good

309
00:14:27,789 --> 00:14:33,308
little benchmark for when you're

310
00:14:30,879 --> 00:14:36,370
investigating something especially free

311
00:14:33,308 --> 00:14:38,230
energy devices so for the benefit out of

312
00:14:36,370 --> 00:14:40,480
our listeners who are sitting on their

313
00:14:38,230 --> 00:14:42,129
four-legged chairs could the moment or

314

00:14:40,480 --> 00:14:44,709
whatever they're doing how does the

315
00:14:42,129 --> 00:14:46,629
three-legged stool work well it says

316
00:14:44,708 --> 00:14:48,429
that if you're assessing some new claim

317
00:14:46,629 --> 00:14:51,009
regarding a new type of science or

318
00:14:48,429 --> 00:14:53,198
technology or health care or something

319
00:14:51,009 --> 00:14:55,149
like that there's three tests you should

320
00:14:53,198 --> 00:14:58,719
give it one is there a theory that makes

321
00:14:55,149 --> 00:15:00,129
it possible at least right and two are

322
00:14:58,720 --> 00:15:02,589
their measurements that show that is

323
00:15:00,129 --> 00:15:03,670
actually happening and three does the

324
00:15:02,589 --> 00:15:05,709
claimant have any sort of creb

325
00:15:03,669 --> 00:15:07,899
credibility that should that you should

326
00:15:05,708 --> 00:15:09,489
believe what they're saying so we went

327
00:15:07,899 --> 00:15:12,970
through this case according to those

328
00:15:09,490 --> 00:15:14,938

three categories and basically found out

329

00:15:12,970 --> 00:15:17,709

that it's falling short on all of those

330

00:15:14,938 --> 00:15:19,058

so to cut it short therefore I

331

00:15:17,708 --> 00:15:20,949

recommended the dick that he doesn't

332

00:15:19,058 --> 00:15:23,350

invest in this run

333

00:15:20,950 --> 00:15:25,180

and that that end you could no doubt be

334

00:15:23,350 --> 00:15:26,830

used to feel the plane that's just

335

00:15:25,179 --> 00:15:28,239

flying overhead which is exciting the

336

00:15:26,830 --> 00:15:32,230

dogs is all happening here at Ian's

337

00:15:28,240 --> 00:15:34,389

place everybody oh there we go it's it's

338

00:15:32,230 --> 00:15:35,950

gone away so yes this is it's great

339

00:15:34,389 --> 00:15:38,379

because you look at three the three

340

00:15:35,950 --> 00:15:40,480

major points and I think I love the way

341

00:15:38,379 --> 00:15:42,100

you put it if one of the legs isn't

342

00:15:40,480 --> 00:15:44,170

working the stools going to fall

343
00:15:42,100 --> 00:15:46,389
probably all over right and if it's got

344
00:15:44,169 --> 00:15:48,519
three broken legs then it's probably not

345
00:15:46,389 --> 00:15:52,600
even worth considering further yeah yeah

346
00:15:48,519 --> 00:15:54,970
so how in this situation how did the

347
00:15:52,600 --> 00:15:57,159
three legs stack up or not well we can

348
00:15:54,970 --> 00:15:58,480
go through them in a bit more detail the

349
00:15:57,159 --> 00:16:01,179
first one is the credibility looking at

350
00:15:58,480 --> 00:16:03,190
Rossi's history now this is the the guy

351
00:16:01,179 --> 00:16:07,299
usually is the guy initially enter yes

352
00:16:03,190 --> 00:16:09,070
the local representative doesn't have

353
00:16:07,299 --> 00:16:10,929
any knowledge really of whether it's

354
00:16:09,070 --> 00:16:14,800
valid or not so let's turn our focus to

355
00:16:10,929 --> 00:16:17,739
the Italian origin of it yeah so andrea

356
00:16:14,799 --> 00:16:20,500
rossi has been imprisoned twice for

357
00:16:17,740 --> 00:16:22,960
various charges to do with environmental

358
00:16:20,500 --> 00:16:25,889
fraud he's got a he's had a previous

359
00:16:22,960 --> 00:16:30,220
invention called a thermoelectric

360
00:16:25,889 --> 00:16:32,350
generator which he sold 29 devices for

361
00:16:30,220 --> 00:16:36,240
evaluation and none of them worked here

362
00:16:32,350 --> 00:16:39,070
not a very good record he has apparently

363
00:16:36,240 --> 00:16:41,049
stated false academic credentials which

364
00:16:39,070 --> 00:16:43,330
he doesn't have caused himself a

365
00:16:41,049 --> 00:16:47,799
physicist when his only degree is in

366
00:16:43,330 --> 00:16:50,530
philosophy and lots of problems like

367
00:16:47,799 --> 00:16:53,079
that so that's not a showstopper

368
00:16:50,529 --> 00:16:55,149
basically I agreed isn't it doesn't bode

369
00:16:53,080 --> 00:16:57,670
well it doesn't mean he can't even avert

370
00:16:55,149 --> 00:16:59,649
invented something wonderful but it's

371

00:16:57,669 --> 00:17:02,829
not a good start one might say exactly

372
00:16:59,649 --> 00:17:05,109
the second way is the theory Rossi's

373
00:17:02,830 --> 00:17:07,328
basing it on he thinks it's cold fusion

374
00:17:05,109 --> 00:17:08,799
or says it's cold fusion which will

375
00:17:07,328 --> 00:17:10,659
remember back in the 1980s with

376
00:17:08,799 --> 00:17:13,588
Fleischmann and pons year has never been

377
00:17:10,660 --> 00:17:17,199
reproduced that long ago 90 yes indeed

378
00:17:13,588 --> 00:17:20,849
so since then the field has been renamed

379
00:17:17,199 --> 00:17:23,500
low energy nuclear reactions le NR and

380
00:17:20,849 --> 00:17:25,149
broadened and this quite a body of

381
00:17:23,500 --> 00:17:28,240
research in it now very much on the

382
00:17:25,150 --> 00:17:29,490
fringes of science yeah is it is there

383
00:17:28,240 --> 00:17:33,190
such a thing well no one's actually

384
00:17:29,490 --> 00:17:34,450
shown that there is and the theory is

385
00:17:33,190 --> 00:17:40,950

based on

386

00:17:34,450 --> 00:17:43,389

quantum theory of condensed matter and

387

00:17:40,950 --> 00:17:45,519

electrons that have become very heavy so

388

00:17:43,388 --> 00:17:47,138

they can orbit closer to the nucleus of

389

00:17:45,519 --> 00:17:50,470

a hydrogen atom and this has never been

390

00:17:47,138 --> 00:17:52,479

observed and it's doubtful that it

391

00:17:50,470 --> 00:17:53,649

exists at all but there is a field of

392

00:17:52,480 --> 00:17:57,610

study there and there are published

393

00:17:53,648 --> 00:18:00,369

papers on it however Rossi's been able

394

00:17:57,609 --> 00:18:01,959

to get any of his own papers published

395

00:18:00,369 --> 00:18:04,479

in any scientific journal so he created

396

00:18:01,960 --> 00:18:06,370

his own so-called scientific journal the

397

00:18:04,480 --> 00:18:09,460

Journal of nuclear physics mm-hm and

398

00:18:06,369 --> 00:18:11,439

he's the only one who writes trip that's

399

00:18:09,460 --> 00:18:14,440

a bit odd maybe he peer reviewed it

400
00:18:11,440 --> 00:18:16,778
himself so there's no theory to support

401
00:18:14,440 --> 00:18:18,788
it right what we do find that and the

402
00:18:16,778 --> 00:18:20,558
third leg of the stool his experiments

403
00:18:18,788 --> 00:18:22,359
and misses there's a fair bit more

404
00:18:20,558 --> 00:18:24,069
detail available on the experiments than

405
00:18:22,359 --> 00:18:26,949
the other areas so I went through the

406
00:18:24,069 --> 00:18:29,528
claimed about five different

407
00:18:26,950 --> 00:18:34,179
demonstrations during 2011 that he's

408
00:18:29,528 --> 00:18:36,548
reported and in each of those we find

409
00:18:34,179 --> 00:18:39,278
out the physic considerable doubt about

410
00:18:36,548 --> 00:18:43,798
the measurements uh-huh for example

411
00:18:39,278 --> 00:18:45,429
there was one case where his

412
00:18:43,798 --> 00:18:49,329
demonstration was observed by two

413
00:18:45,429 --> 00:18:51,370
Swedish nuclear physicists rias's quite

414
00:18:49,329 --> 00:18:54,278
remarkable and they both they jointly

415
00:18:51,369 --> 00:18:58,898
published a travel report which said

416
00:18:54,278 --> 00:19:00,339
that the results as they saw them tend

417
00:18:58,898 --> 00:19:02,528
to support the idea that there was a

418
00:19:00,339 --> 00:19:04,538
production of energy going on more than

419
00:19:02,528 --> 00:19:07,359
you could hear from chemical reaction so

420
00:19:04,538 --> 00:19:09,069
this is one of the groups of scientists

421
00:19:07,359 --> 00:19:10,869
that give some support to it in fact one

422
00:19:09,069 --> 00:19:12,278
of them used to be the chairman of the

423
00:19:10,869 --> 00:19:14,798
Swedish skeptics which is a sister

424
00:19:12,278 --> 00:19:17,829
organization to Australians kept here so

425
00:19:14,798 --> 00:19:20,558
we hold his opinion in high regard of

426
00:19:17,829 --> 00:19:22,480
course so what I looked at was i

427
00:19:20,558 --> 00:19:27,009
reverse-engineered the charts that were

428

00:19:22,480 --> 00:19:28,960
provided by Rossi and carried it to

429
00:19:27,009 --> 00:19:31,538
another level of analysis not taking it

430
00:19:28,960 --> 00:19:33,819
at face value and given the temperature

431
00:19:31,538 --> 00:19:35,079
reports of Rossi's reactor perhaps I

432
00:19:33,819 --> 00:19:36,759
should stop for a moment and describe

433
00:19:35,079 --> 00:19:39,699
what's happening Rossi's gotta yes how

434
00:19:36,759 --> 00:19:41,788
does the machinist seem to work in ok

435
00:19:39,700 --> 00:19:44,350
well the basic device is an I-shaped

436
00:19:41,788 --> 00:19:45,579
copper device it looks like a set of

437
00:19:44,349 --> 00:19:48,038
plumbing that you ordered from the

438
00:19:45,579 --> 00:19:48,639
hardware store together with them torch

439
00:19:48,038 --> 00:19:51,309
yeah

440
00:19:48,640 --> 00:19:53,380
and it's not very big is it that's right

441
00:19:51,309 --> 00:19:55,210
there's big as a shoe box my first

442
00:19:53,380 --> 00:19:57,070

branch contains a little so-called

443

00:19:55,210 --> 00:19:59,529

nuclear reactor with nipple powder a

444

00:19:57,069 --> 00:20:00,939

nickel flakes and hydrogen in it and an

445

00:19:59,529 --> 00:20:03,399

unknown catalyst which is supposed to

446

00:20:00,940 --> 00:20:04,870

react once you warm it up the water

447

00:20:03,400 --> 00:20:06,490

flows down oven gets hot then as a

448

00:20:04,869 --> 00:20:08,529

vertical chimney his purpose is to

449

00:20:06,490 --> 00:20:12,160

collect the steam and that goes out a

450

00:20:08,529 --> 00:20:15,039

hose so in the end it will this machine

451

00:20:12,160 --> 00:20:17,800

is designed to generate steam to drive a

452

00:20:15,039 --> 00:20:19,119

turbine and yes the power here it's a

453

00:20:17,799 --> 00:20:20,619

bit of a mystery why rusty has never

454

00:20:19,119 --> 00:20:23,049

harnessed the steam coming out for any

455

00:20:20,619 --> 00:20:25,659

useful purpose which means that you have

456

00:20:23,049 --> 00:20:27,669

to do the efficiency calculation based

457
00:20:25,660 --> 00:20:30,400
on 2 and like things which is always a

458
00:20:27,670 --> 00:20:32,940
bad sign right does cold water going in

459
00:20:30,400 --> 00:20:35,950
and there's some steam coming out ok so

460
00:20:32,940 --> 00:20:37,420
in this case there's a couple of

461
00:20:35,950 --> 00:20:40,450
problems with the experiment and one is

462
00:20:37,420 --> 00:20:43,840
the thing looking at the temperature of

463
00:20:40,450 --> 00:20:47,410
the water coming out over time which the

464
00:20:43,839 --> 00:20:50,980
data has been provided in full to me

465
00:20:47,410 --> 00:20:53,170
indicates that has not so much in

466
00:20:50,980 --> 00:20:54,700
accordance with the nuclear reaction as

467
00:20:53,170 --> 00:20:56,320
it is with something else because for

468
00:20:54,700 --> 00:20:59,230
example there's 300 watts of electrical

469
00:20:56,319 --> 00:21:00,549
power going in at the start and the rate

470
00:20:59,230 --> 00:21:03,220
that the device is heating up at

471
00:21:00,549 --> 00:21:04,899
indicates that there 750 watts being

472
00:21:03,220 --> 00:21:07,029
dissipated in the device from the start

473
00:21:04,900 --> 00:21:10,330
hmm this is before the nuclear reaction

474
00:21:07,029 --> 00:21:12,519
kicks in while it's still cold so that's

475
00:21:10,329 --> 00:21:14,859
750 watts not 300 watts bit of a puzzle

476
00:21:12,519 --> 00:21:16,240
yeah and if it was a pure nuclear

477
00:21:14,859 --> 00:21:19,479
reaction that must already have kicked

478
00:21:16,240 --> 00:21:23,049
in at only 28 degrees C hasn't be quite

479
00:21:19,480 --> 00:21:24,910
scary because it means your reactants

480
00:21:23,049 --> 00:21:26,379
could start reacting at room temperature

481
00:21:24,910 --> 00:21:30,850
on holiday that should be rid of a

482
00:21:26,380 --> 00:21:33,370
Warren another thing is that that after

483
00:21:30,849 --> 00:21:35,589
a while the power suddenly goes up to

484
00:21:33,369 --> 00:21:38,519
the apparent power goes up to seventeen

485

00:21:35,589 --> 00:21:41,379
hundred Watts from 750 more than double

486
00:21:38,519 --> 00:21:44,019
instantly yeah change in slope of that

487
00:21:41,380 --> 00:21:45,370
at the temperature curve and this is

488
00:21:44,019 --> 00:21:46,990
very odd that a nuclear reaction would

489
00:21:45,369 --> 00:21:50,439
kick in so suddenly and double so

490
00:21:46,990 --> 00:21:53,500
suddenly in a bit later on the device

491
00:21:50,440 --> 00:21:56,049
cools down for 20 seconds I saw that in

492
00:21:53,500 --> 00:21:57,880
your chart yes is this a strange dip is

493
00:21:56,049 --> 00:21:59,169
now that's right that's bit odd to think

494
00:21:57,880 --> 00:22:01,210
that a nuclear reaction would suddenly

495
00:21:59,170 --> 00:22:02,140
decide is going to stop wait for 20

496
00:22:01,210 --> 00:22:04,240
seconds and resume

497
00:22:02,140 --> 00:22:06,000
at a higher level even though the it had

498
00:22:04,240 --> 00:22:09,279
cooled down in the meantime yeah right

499
00:22:06,000 --> 00:22:11,400

so that the theory the hypothesis that a

500

00:22:09,279 --> 00:22:14,410

real nuclear reaction looks very

501

00:22:11,400 --> 00:22:17,530

doubtful to me and to me it's more

502

00:22:14,410 --> 00:22:19,840

suggestive of someone fiddling with the

503

00:22:17,529 --> 00:22:22,119

electrical input if for example they

504

00:22:19,839 --> 00:22:24,039

started off with 750 watts not the state

505

00:22:22,119 --> 00:22:27,129

of 300 left it there for a couple of

506

00:22:24,039 --> 00:22:30,369

hours then connected it to a higher

507

00:22:27,130 --> 00:22:33,160

voltage so it produced more power 1700

508

00:22:30,369 --> 00:22:35,469

and then for 20 seconds they

509

00:22:33,160 --> 00:22:37,420

disconnected it from bad voltage supply

510

00:22:35,470 --> 00:22:39,880

reconnected it to a high voltage supply

511

00:22:37,420 --> 00:22:41,830

again that would fit the data much more

512

00:22:39,880 --> 00:22:44,260

better yeah I think so i'd say the

513

00:22:41,829 --> 00:22:46,029

alternative hypothesis is better

514
00:22:44,259 --> 00:22:47,680
supported than the nuclear reaction one

515
00:22:46,029 --> 00:22:49,569
who have its own in my opinion and I'm

516
00:22:47,680 --> 00:22:52,390
us with a disclaimer that if more data

517
00:22:49,569 --> 00:22:55,839
comes well then I can always change that

518
00:22:52,390 --> 00:22:57,670
view so it sounds to me though if for

519
00:22:55,839 --> 00:23:00,459
the sake of argument is think this guy

520
00:22:57,670 --> 00:23:02,529
has invented something which is works as

521
00:23:00,460 --> 00:23:05,079
he claimed it would be really really

522
00:23:02,529 --> 00:23:07,269
dangerous don't you think but you

523
00:23:05,079 --> 00:23:08,829
haven't heard Harvard epogen yeah this

524
00:23:07,269 --> 00:23:10,029
is a little device right the next

525
00:23:08,829 --> 00:23:13,119
demonstration was on a much bigger

526
00:23:10,029 --> 00:23:14,799
device you weighed 98 kilograms oh wow

527
00:23:13,119 --> 00:23:18,129
instead of four kilograms it's more than

528
00:23:14,799 --> 00:23:20,109
me but why you love me that's right I'm

529
00:23:18,130 --> 00:23:21,700
not going to believe this but if you to

530
00:23:20,109 --> 00:23:24,609
believe what he told the observers

531
00:23:21,700 --> 00:23:25,960
reported he turned on the heating device

532
00:23:24,609 --> 00:23:27,729
which is supposed to start the nuclear

533
00:23:25,960 --> 00:23:30,069
reaction two hours before it filled up

534
00:23:27,730 --> 00:23:31,269
with water so he's got the electrical

535
00:23:30,069 --> 00:23:33,159
heating going on while the water is

536
00:23:31,269 --> 00:23:35,559
being pumped into the chamber to imagine

537
00:23:33,160 --> 00:23:38,230
starting your car engine and taking two

538
00:23:35,559 --> 00:23:41,349
hours to fill a radiator it would cook

539
00:23:38,230 --> 00:23:43,420
and fry it very popular and if you and

540
00:23:41,349 --> 00:23:46,119
given the Rossi's claiming there's a

541
00:23:43,420 --> 00:23:47,259
nuclear reaction there imagine can you

542

00:23:46,119 --> 00:23:49,119
remember what happened to Three Mile

543
00:23:47,259 --> 00:23:50,950
Island and sure noble you're not good

544
00:23:49,119 --> 00:23:54,129
for kushina when they ran out of cooling

545
00:23:50,950 --> 00:23:55,900
water and it wasn't good not good so if

546
00:23:54,130 --> 00:23:57,280
this is really a nuclear reaction i'd be

547
00:23:55,900 --> 00:23:58,930
really a little bit worried about

548
00:23:57,279 --> 00:24:01,059
prossies approach to the whole thing and

549
00:23:58,930 --> 00:24:03,940
i was interested to seeing your note

550
00:24:01,059 --> 00:24:06,059
concerns you were raising it concerns is

551
00:24:03,940 --> 00:24:09,370
the right word about the lack of

552
00:24:06,059 --> 00:24:13,089
perceived radioactivity in the steam or

553
00:24:09,369 --> 00:24:14,889
the water yes like physics degree did

554
00:24:13,089 --> 00:24:15,429
add a little bit of nuclear physics in

555
00:24:14,890 --> 00:24:18,400
it

556
00:24:15,430 --> 00:24:20,140

and but I understand that if a real

557

00:24:18,400 --> 00:24:22,150

nuclear reaction is going on at a high

558

00:24:20,140 --> 00:24:23,800

enough level to produce power then all

559

00:24:22,150 --> 00:24:25,870

of the things around it will show some

560

00:24:23,799 --> 00:24:27,879

evidence of radioactivity afterwards

561

00:24:25,869 --> 00:24:29,409

yeah which needs to be guarded against

562

00:24:27,880 --> 00:24:32,170

yeah and you've got ways to dispose off

563

00:24:29,410 --> 00:24:33,730

yeah when Ross is running this device he

564

00:24:32,170 --> 00:24:35,950

holds the output hose in his hand

565

00:24:33,730 --> 00:24:37,720

admittedly a gloved hand to protect from

566

00:24:35,950 --> 00:24:41,529

the heat and he lets it run down the

567

00:24:37,720 --> 00:24:44,529

sink Oh No maybe the Italian authorities

568

00:24:41,529 --> 00:24:46,569

might like to hear about that so that's

569

00:24:44,529 --> 00:24:49,839

not another good indicator that there's

570

00:24:46,569 --> 00:24:52,599

a nuclear reaction going on no no it's

571
00:24:49,839 --> 00:24:54,609
not that no I will I hope not in this

572
00:24:52,599 --> 00:24:56,829
case I hope not if it is I hope that

573
00:24:54,609 --> 00:24:59,769
he's doing something better with the

574
00:24:56,829 --> 00:25:03,429
water now okay so you're up there at the

575
00:24:59,769 --> 00:25:05,170
meeting and you are able to to tell the

576
00:25:03,430 --> 00:25:08,320
audience and how many people actually

577
00:25:05,170 --> 00:25:12,009
came along about 70 wow that's quite a

578
00:25:08,319 --> 00:25:14,200
lot quite alone tell the audience from

579
00:25:12,009 --> 00:25:17,619
your point of view what you thought of

580
00:25:14,200 --> 00:25:20,860
the data so far and the engine and what

581
00:25:17,619 --> 00:25:23,109
have you how was how was the reaction

582
00:25:20,859 --> 00:25:25,119
then apart from the ones who walked out

583
00:25:23,109 --> 00:25:27,039
when you mention the vaccination network

584
00:25:25,119 --> 00:25:31,419
how are the how was the reaction then

585
00:25:27,039 --> 00:25:35,710
from the audience well when the

586
00:25:31,420 --> 00:25:37,330
Australian host so tried to shut me up

587
00:25:35,710 --> 00:25:38,470
by saying he thought we'd run out of

588
00:25:37,329 --> 00:25:40,419
time and we should leave room for

589
00:25:38,470 --> 00:25:41,680
questions some money all that let him

590
00:25:40,420 --> 00:25:44,410
finish I want to hear what he's got to

591
00:25:41,680 --> 00:25:48,430
say that was a good sign and they did

592
00:25:44,410 --> 00:25:50,860
hear me out to the end but they would

593
00:25:48,430 --> 00:25:52,269
there were quite a few questions the

594
00:25:50,859 --> 00:25:53,829
questions were about a third to do with

595
00:25:52,269 --> 00:25:56,049
the science of it and about two-thirds

596
00:25:53,829 --> 00:25:58,599
do with the finance so i guess the

597
00:25:56,049 --> 00:25:59,740
people questioning the science we had

598
00:25:58,599 --> 00:26:01,119
got through to them there's something

599

00:25:59,740 --> 00:26:02,529
wrong with the science beautiful

600
00:26:01,119 --> 00:26:03,939
questioning the finance that got over

601
00:26:02,529 --> 00:26:05,139
the science and were more interested in

602
00:26:03,940 --> 00:26:07,779
how the money was going to be

603
00:26:05,140 --> 00:26:09,670
distributed so it's a bit of a mixture

604
00:26:07,779 --> 00:26:11,519
there but i did get a bit of an idea of

605
00:26:09,670 --> 00:26:14,259
the demographic we were dealing with

606
00:26:11,519 --> 00:26:16,660
because i asked them i'd like to do a

607
00:26:14,259 --> 00:26:18,250
little survey here if you believe that

608
00:26:16,660 --> 00:26:19,720
the laws of physics as we understand

609
00:26:18,250 --> 00:26:20,819
them are correct can you put your hand

610
00:26:19,720 --> 00:26:23,450
up

611
00:26:20,819 --> 00:26:27,058
and about ten percent put their hand up

612
00:26:23,450 --> 00:26:28,500
and then I said well if and now those

613
00:26:27,058 --> 00:26:30,298

who think the laws of physics as we

614

00:26:28,500 --> 00:26:31,470

understand them are completely wrong put

615

00:26:30,298 --> 00:26:33,960

your hand up and about twenty percent

616

00:26:31,470 --> 00:26:35,610

but their hand up good and then someone

617

00:26:33,960 --> 00:26:37,919

said look I think I can speak for most

618

00:26:35,609 --> 00:26:39,359

of us here what we believe is the laws

619

00:26:37,919 --> 00:26:42,179

of physics as we understand them might

620

00:26:39,359 --> 00:26:44,129

be might be valid because we see things

621

00:26:42,179 --> 00:26:45,750

around working but they're not complete

622

00:26:44,130 --> 00:26:50,278

there's more things to be discovered

623

00:26:45,750 --> 00:26:52,109

that could explain these things so there

624

00:26:50,278 --> 00:26:53,909

you go that was three that was the

625

00:26:52,109 --> 00:26:55,949

current paradigm which is a little bit

626

00:26:53,909 --> 00:26:59,309

from the heart of Sydney when I give

627

00:26:55,950 --> 00:27:02,879

talks here they very much hard-nosed

628
00:26:59,308 --> 00:27:05,599
well it's especially if they've come

629
00:27:02,878 --> 00:27:07,980
along to this meeting with the hope of

630
00:27:05,599 --> 00:27:11,028
finding something wonderful to invest

631
00:27:07,980 --> 00:27:12,990
their money in and with a mixture of

632
00:27:11,028 --> 00:27:14,638
motivations I would imagine there would

633
00:27:12,990 --> 00:27:16,859
be some there who had the eye for the

634
00:27:14,638 --> 00:27:19,168
for the investment opportunity to make

635
00:27:16,859 --> 00:27:22,199
money and I'm sure there were plenty of

636
00:27:19,169 --> 00:27:23,778
people there who wanted to invest in

637
00:27:22,200 --> 00:27:28,278
something that they thought could

638
00:27:23,778 --> 00:27:34,829
seriously help our society in our planet

639
00:27:28,278 --> 00:27:36,450
yes that threats very much present for

640
00:27:34,829 --> 00:27:37,859
nearly all of the people want to do

641
00:27:36,450 --> 00:27:39,269
something to help save the planet they

642
00:27:37,859 --> 00:27:42,178
fare very much in tune with the earth

643
00:27:39,269 --> 00:27:44,730
living among often among the hills along

644
00:27:42,179 --> 00:27:46,230
their mud brick in the mud brick houses

645
00:27:44,730 --> 00:27:48,750
and so forth in their little patch of

646
00:27:46,230 --> 00:27:51,960
rainforest yes so that's a quite

647
00:27:48,750 --> 00:27:53,490
positive thing to say well I mean in a

648
00:27:51,960 --> 00:27:57,659
lot of people's hearts are in the right

649
00:27:53,490 --> 00:28:02,548
place which is sometimes why it's hard

650
00:27:57,659 --> 00:28:05,159
for them to hear or accept something

651
00:28:02,548 --> 00:28:07,648
like The Skeptical point of view which

652
00:28:05,159 --> 00:28:10,830
says which would say yes wouldn't it be

653
00:28:07,648 --> 00:28:14,459
wonderful if this was the case however

654
00:28:10,829 --> 00:28:17,128
we can look at this in somewhat the cold

655
00:28:14,460 --> 00:28:20,370
hard light of day and find this probably

656

00:28:17,128 --> 00:28:22,589
not cold fusion at all that's right I

657
00:28:20,369 --> 00:28:24,359
would like if we have some overseas

658
00:28:22,589 --> 00:28:27,240
listeners from not in Australia I would

659
00:28:24,359 --> 00:28:28,918
like you to do me a favor perhaps you

660
00:28:27,240 --> 00:28:31,980
could do a little search to find out

661
00:28:28,919 --> 00:28:33,660
whether Rossi's ecat is being promoted

662
00:28:31,980 --> 00:28:36,299
in your own country

663
00:28:33,660 --> 00:28:37,620
and if you find out anything even a

664
00:28:36,299 --> 00:28:39,180
negative result could you let us know

665
00:28:37,619 --> 00:28:42,719
perhaps you could send an email to the

666
00:28:39,180 --> 00:28:46,740
Australian skeptics which is NSW at

667
00:28:42,720 --> 00:28:48,600
skeptics with a KOA you that's it folks

668
00:28:46,740 --> 00:28:51,630
if you're wherever you are in the world

669
00:28:48,599 --> 00:28:54,629
have a look around Google away you might

670
00:28:51,630 --> 00:28:57,120

have heard something Rossi and the e-cat

671

00:28:54,630 --> 00:29:00,060

energy device is a good energy catalyzed

672

00:28:57,119 --> 00:29:01,709

energy catalyzer and you can contact ian

673

00:29:00,059 --> 00:29:06,269

at that address you just mentioned

674

00:29:01,710 --> 00:29:07,980

that's NSW at skeptics calm a you and

675

00:29:06,269 --> 00:29:10,859

let him know if you've discovered

676

00:29:07,980 --> 00:29:13,019

anything if you're interested in a bit

677

00:29:10,859 --> 00:29:15,299

of further information the most

678

00:29:13,019 --> 00:29:17,190

comprehensive website fruit from a

679

00:29:15,299 --> 00:29:21,659

skeptical point of view that I've found

680

00:29:17,190 --> 00:29:26,519

that mentions Rossi's device is ESO

681

00:29:21,660 --> 00:29:28,769

watch ESO wa TCH if you do a little

682

00:29:26,519 --> 00:29:30,629

Google you'll find ESO watch and there's

683

00:29:28,769 --> 00:29:32,430

a they do have many skeptical topics

684

00:29:30,630 --> 00:29:35,700

they investigate including a very long

685
00:29:32,430 --> 00:29:37,380
article unless it's a cat great Willian

686
00:29:35,700 --> 00:29:39,779
this is just one of the long line of

687
00:29:37,380 --> 00:29:42,690
energy devices you've been looking into

688
00:29:39,779 --> 00:29:45,420
over something like 30 leading is yes we

689
00:29:42,690 --> 00:29:48,240
remember way back in decades passed over

690
00:29:45,420 --> 00:29:51,450
various fuel polarizers there were

691
00:29:48,240 --> 00:29:53,400
various pool cleaning devices that

692
00:29:51,450 --> 00:29:55,470
you've been in looking into and cars

693
00:29:53,400 --> 00:29:57,330
that run it on water and all sorts of in

694
00:29:55,470 --> 00:29:59,220
fact that was brought up at thee nothing

695
00:29:57,329 --> 00:30:01,879
been be meeting was it was it but what

696
00:29:59,220 --> 00:30:05,789
could I tell them about the hydrogen pad

697
00:30:01,880 --> 00:30:06,960
care that JBL p peterson was worse of

698
00:30:05,789 --> 00:30:08,759
them a bit about that night old necklace

699
00:30:06,960 --> 00:30:11,700
i think the first article i wrote for

700
00:30:08,759 --> 00:30:14,129
the skeptic got here that 1981 and after

701
00:30:11,700 --> 00:30:17,090
all these years is treated over three

702
00:30:14,130 --> 00:30:19,530
decades of investigating these things

703
00:30:17,089 --> 00:30:21,839
we've still yet to find the Holy Grail

704
00:30:19,529 --> 00:30:23,399
alone only the bat pot of gold at the

705
00:30:21,839 --> 00:30:25,470
end of the rainbow is very elusive

706
00:30:23,400 --> 00:30:27,330
that's right maybe that maybe instead

707
00:30:25,470 --> 00:30:30,360
Sciences as we find it in the world is

708
00:30:27,329 --> 00:30:31,889
as it appears to be and the way we need

709
00:30:30,359 --> 00:30:34,349
to save the planet is to use less energy

710
00:30:31,890 --> 00:30:36,230
and find renewable energy you've heard

711
00:30:34,349 --> 00:30:38,159
it here first folks ian bryce from

712
00:30:36,230 --> 00:30:40,470
australian skeptics our chief

713

00:30:38,160 --> 00:30:42,050
investigator great to have you back on

714
00:30:40,470 --> 00:30:43,970
the skeptic zone again and

715
00:30:42,049 --> 00:30:45,829
that will listeners if you know the free

716
00:30:43,970 --> 00:30:49,400
energy device or a wonderful energy

717
00:30:45,829 --> 00:31:04,339
saving device let you know Ian thank you

718
00:30:49,400 --> 00:31:06,080
paki Richard this is ben Radford I'm

719
00:31:04,339 --> 00:31:07,970
deputy editor of skeptical inquirer

720
00:31:06,079 --> 00:31:10,429
science magazine author of six books

721
00:31:07,970 --> 00:31:11,960
including tracking chupacabra and you

722
00:31:10,430 --> 00:31:19,279
can find out more about me at Benjamin

723
00:31:11,960 --> 00:31:21,170
Radford com hi this is Tim Farley you

724
00:31:19,279 --> 00:31:24,049
probably know me from what's the harm

725
00:31:21,170 --> 00:31:26,779
net a catalog of the real world harm

726
00:31:24,049 --> 00:31:29,720
caused by lack of critical thinking but

727
00:31:26,779 --> 00:31:32,720

that's not my only project i present at

728

00:31:29,720 --> 00:31:35,000

skeptic events I post a daily skeptic

729

00:31:32,720 --> 00:31:37,819

history fact on Twitter and Facebook and

730

00:31:35,000 --> 00:31:40,940

I blog about using new techniques on the

731

00:31:37,819 --> 00:31:44,119

internet to advance skepticism come over

732

00:31:40,940 --> 00:31:47,539

to skip tools com and check out my

733

00:31:44,119 --> 00:31:50,469

latest ideas but first enjoy the rest of

734

00:31:47,539 --> 00:31:50,470

the skeptic zone

735

00:31:56,819 --> 00:32:01,299

but two more your skipped again it

736

00:31:59,680 --> 00:32:03,700

depends on what what do you we're doing

737

00:32:01,299 --> 00:32:05,619

that but I am and people that talk to

738

00:32:03,700 --> 00:32:07,360

the afterlife and forecast the future

739

00:32:05,619 --> 00:32:08,979

i'm a total skeptic on that kind of

740

00:32:07,359 --> 00:32:11,019

thing what about alternative medicine

741

00:32:08,980 --> 00:32:12,460

sometimes sure they are magnetic

742
00:32:11,019 --> 00:32:14,769
mattresses that had me a bit puzzled

743
00:32:12,460 --> 00:32:16,150
edge or well Loretta Marin is the

744
00:32:14,769 --> 00:32:18,160
Australian skeptic of the year for the

745
00:32:16,150 --> 00:32:20,500
second time and she is continuing her

746
00:32:18,160 --> 00:32:22,570
campaign against unproven alternative

747
00:32:20,500 --> 00:32:24,490
medicines and practices and she's also

748
00:32:22,569 --> 00:32:27,519
the inaugural chief executive officer of

749
00:32:24,490 --> 00:32:29,799
friends of science in medicine she joins

750
00:32:27,519 --> 00:32:32,019
us now hi Loretta how are you very well

751
00:32:29,799 --> 00:32:34,299
now you've had a long-running battle to

752
00:32:32,019 --> 00:32:36,339
expose for jilat claims and things like

753
00:32:34,299 --> 00:32:38,230
that why did you start your campaign

754
00:32:36,339 --> 00:32:40,240
against alternative medicines well i

755
00:32:38,230 --> 00:32:42,759
think it was when i was diagnosed with

756
00:32:40,240 --> 00:32:44,680
breast cancer and that was 2003 and

757
00:32:42,759 --> 00:32:47,710
thanks to modern medicine i'm still here

758
00:32:44,680 --> 00:32:50,289
and my background is physics and

759
00:32:47,710 --> 00:32:53,140
computers so medicine was never of

760
00:32:50,289 --> 00:32:54,789
interest to me I kept I've always eatin

761
00:32:53,140 --> 00:32:58,240
healthy and being quite athletic and all

762
00:32:54,789 --> 00:33:00,490
the rest of it as most of us are yes and

763
00:32:58,240 --> 00:33:02,680
but once I walk through that cancer door

764
00:33:00,490 --> 00:33:04,630
I went to a whole new world and it was

765
00:33:02,680 --> 00:33:06,880
you know voodoo and witchcraft and

766
00:33:04,630 --> 00:33:08,920
really no sin credibly vulnerable people

767
00:33:06,880 --> 00:33:10,750
I've ever seen just sitting there

768
00:33:08,920 --> 00:33:13,539
perched on their the edges of their

769
00:33:10,750 --> 00:33:16,690
chest listening to information that was

770

00:33:13,539 --> 00:33:19,089
just so wrong whereabouts was known as

771
00:33:16,690 --> 00:33:20,680
emotions being dished out well the sad

772
00:33:19,089 --> 00:33:23,199
thing is it was at my local breast

773
00:33:20,680 --> 00:33:24,759
cancer support group Rosa and I went

774
00:33:23,200 --> 00:33:26,620
along there to listen to the local

775
00:33:24,759 --> 00:33:28,990
friendly naturopathy for lovely fluffy

776
00:33:26,619 --> 00:33:31,689
people right very nice friendly girl and

777
00:33:28,990 --> 00:33:33,609
she started and just would not stop

778
00:33:31,690 --> 00:33:35,920
attacking doctors you know thing they're

779
00:33:33,609 --> 00:33:37,899
owned by the drug companies and and she

780
00:33:35,920 --> 00:33:40,690
attacked everything you wait you know no

781
00:33:37,900 --> 00:33:42,280
no dairy no alcohol well that was that

782
00:33:40,690 --> 00:33:45,880
was a bit of a tough one don't eat

783
00:33:42,279 --> 00:33:47,950
anything wyd eat everything purple kin

784
00:33:45,880 --> 00:33:50,410

food has no nutrition microwave food is

785

00:33:47,950 --> 00:33:53,380

no nutrition just went on and on and on

786

00:33:50,410 --> 00:33:56,529

and then she started to sell product she

787

00:33:53,380 --> 00:33:58,480

held up a big container of soy and one

788

00:33:56,529 --> 00:34:00,849

woman now these women have just been

789

00:33:58,480 --> 00:34:02,440

treated for cancer and they're bored and

790

00:34:00,849 --> 00:34:04,539

they've got tubes hanging off them and

791

00:34:02,440 --> 00:34:06,309

one woman said oh my oncologist said I

792

00:34:04,539 --> 00:34:08,230

shouldn't be having too much though

793

00:34:06,309 --> 00:34:10,150

because of the type of cancer I him and

794

00:34:08,230 --> 00:34:13,030

he said take any advice from your doctor

795

00:34:10,150 --> 00:34:14,950

with a grain of salt Oh women for years

796

00:34:13,030 --> 00:34:17,050

nutrition and they've only done 12 hours

797

00:34:14,949 --> 00:34:20,439

or something like that and I said to her

798

00:34:17,050 --> 00:34:22,810

I i mean i was taking notes because one

799

00:34:20,440 --> 00:34:24,369

thing I'm being no skeptic is about

800

00:34:22,809 --> 00:34:25,809

we're all skeptics but you know I'm not

801

00:34:24,369 --> 00:34:27,309

going to get an electrician around

802

00:34:25,809 --> 00:34:29,860

without checking out that he's got some

803

00:34:27,309 --> 00:34:32,230

qualifications oh yeah but people will

804

00:34:29,860 --> 00:34:34,120

turn up to some alternatives clinic and

805

00:34:32,230 --> 00:34:36,730

one guy had a swimming certificate on

806

00:34:34,119 --> 00:34:37,869

the wall I mean it looked impressive but

807

00:34:36,730 --> 00:34:39,849

I didn't even notice that and that

808

00:34:37,869 --> 00:34:41,799

someone said just one certificate so we

809

00:34:39,849 --> 00:34:43,449

don't check their qualifications we look

810

00:34:41,800 --> 00:34:46,750

at the front of the shop and we walk in

811

00:34:43,449 --> 00:34:50,500

and yes so go with a cancer sufferer

812

00:34:46,750 --> 00:34:53,199

it's a you're desperate well that's

813
00:34:50,500 --> 00:34:54,849
right and as I say with these were in

814
00:34:53,199 --> 00:34:57,250
these ladies invited this girl back

815
00:34:54,849 --> 00:34:59,049
twice so I took all the notes and I went

816
00:34:57,250 --> 00:35:00,010
home and I looked up what she said cuz I

817
00:34:59,050 --> 00:35:02,110
thought well this is interesting I

818
00:35:00,010 --> 00:35:04,810
didn't know that and I found out pretty

819
00:35:02,110 --> 00:35:06,670
well all of it was wrong and I thought

820
00:35:04,809 --> 00:35:08,259
these women now if you've got cancer the

821
00:35:06,670 --> 00:35:10,420
last thing you want to be doing is going

822
00:35:08,260 --> 00:35:11,920
on a restricted done you should be

823
00:35:10,420 --> 00:35:14,050
eating healthy you shouldn't be giving

824
00:35:11,920 --> 00:35:15,639
up all your favorite foods and you're

825
00:35:14,050 --> 00:35:18,160
allowed an occasional glass of wine for

826
00:35:15,639 --> 00:35:20,799
medicinal purposes do you think they

827

00:35:18,159 --> 00:35:22,690
were giving some of the patients false

828
00:35:20,800 --> 00:35:26,080
hope that if they tried this other thing

829
00:35:22,690 --> 00:35:28,000
nah be cured this particular girl wasn't

830
00:35:26,079 --> 00:35:29,769
but I have actually gone to to

831
00:35:28,000 --> 00:35:31,360
practitioners the current affair invited

832
00:35:29,769 --> 00:35:34,719
me to go undercover and I actually

833
00:35:31,360 --> 00:35:37,000
watched I went to makai a woman who was

834
00:35:34,719 --> 00:35:38,829
putting bleach dilute bleach into people

835
00:35:37,000 --> 00:35:41,409
thanks telling them that it would cure

836
00:35:38,829 --> 00:35:43,179
they can't say and I mean I came home

837
00:35:41,409 --> 00:35:46,750
because I couldn't say anything because

838
00:35:43,179 --> 00:35:48,519
my job was to actually somehow show it

839
00:35:46,750 --> 00:35:51,849
on film you know God you've got the

840
00:35:48,519 --> 00:35:53,440
handbag with the camera and came out

841
00:35:51,849 --> 00:35:55,869

with shingles after that but I got home

842

00:35:53,440 --> 00:35:57,460

and I had to ring up my oncologist and

843

00:35:55,869 --> 00:35:58,569

say what do i do and she said report

844

00:35:57,460 --> 00:36:01,179

straight away and they did shut the

845

00:35:58,570 --> 00:36:04,510

woman down and and this woman was you

846

00:36:01,179 --> 00:36:06,279

know this poor patient was dying and i'm

847

00:36:04,510 --> 00:36:08,110

loosing to the practitioner saying oh

848

00:36:06,280 --> 00:36:09,880

yes you can you know it's got really

849

00:36:08,110 --> 00:36:11,710

your brain tumor now it's working on

850

00:36:09,880 --> 00:36:13,329

your breath to Manaus doing all this and

851

00:36:11,710 --> 00:36:15,099

I'll hair green and the woman saying yes

852

00:36:13,329 --> 00:36:16,690

yes I can feel it I can feel it and

853

00:36:15,099 --> 00:36:18,509

paying heaps of money for the service

854

00:36:16,690 --> 00:36:20,280

only three thousand dollars

855

00:36:18,510 --> 00:36:22,230

heavens above now the friends of science

856
00:36:20,280 --> 00:36:23,640
and medicine the skeptic of the year two

857
00:36:22,230 --> 00:36:25,619
years running there and for the second

858
00:36:23,639 --> 00:36:27,690
year that you campaigned against a

859
00:36:25,619 --> 00:36:29,849
different element of medicine and its

860
00:36:27,690 --> 00:36:32,840
fundamental chiropractors well what

861
00:36:29,849 --> 00:36:35,339
happened is chiropractors are documented

862
00:36:32,840 --> 00:36:36,809
15 new south wales websites are you

863
00:36:35,340 --> 00:36:39,510
always do New South Wales because it's

864
00:36:36,809 --> 00:36:41,880
close to Canberra and I think it's close

865
00:36:39,510 --> 00:36:44,580
to the politicians and every single one

866
00:36:41,880 --> 00:36:46,170
of them this was only found 51 and every

867
00:36:44,579 --> 00:36:48,210
fifty one of them on the web claimed

868
00:36:46,170 --> 00:36:51,690
that chiropractic could be used to treat

869
00:36:48,210 --> 00:36:53,579
ADHD asthma allergies bedwetting colic

870
00:36:51,690 --> 00:36:55,590
in ear infection and some of them even

871
00:36:53,579 --> 00:36:57,539
claimed it was an effective alternative

872
00:36:55,590 --> 00:36:59,309
to vaccination this is just spinal

873
00:36:57,539 --> 00:37:01,920
manipulation and this is what they call

874
00:36:59,309 --> 00:37:04,860
fundamentalist chiropractic and then I

875
00:37:01,920 --> 00:37:06,930
documented 30 websites in Victoria they

876
00:37:04,860 --> 00:37:09,000
all said the same and a whole budget can

877
00:37:06,929 --> 00:37:10,649
I think in Queensland and they said the

878
00:37:09,000 --> 00:37:13,050
same again and I thought why they all

879
00:37:10,650 --> 00:37:14,820
saying this is not bad people and I

880
00:37:13,050 --> 00:37:17,400
realized they were teaching it in the

881
00:37:14,820 --> 00:37:19,860
University and I tracked down to RMIT

882
00:37:17,400 --> 00:37:22,769
and they had a pediatric chiropractic

883
00:37:19,860 --> 00:37:24,450
clinic and I tracked down one of the

884

00:37:22,769 --> 00:37:26,789
people teaching in it and of course she

885
00:37:24,449 --> 00:37:29,909
said she teaches the students 88 how to

886
00:37:26,789 --> 00:37:31,529
treat ADHD ethnology bedwetting calling

887
00:37:29,909 --> 00:37:33,179
a fool total nonsense that's

888
00:37:31,530 --> 00:37:34,740
fundamentalist chiropractor that's not

889
00:37:33,179 --> 00:37:37,679
the good guy that looks after your back

890
00:37:34,739 --> 00:37:39,569
he's fine but it's when they go to the

891
00:37:37,679 --> 00:37:41,549
dark side and start to make these claims

892
00:37:39,570 --> 00:37:43,230
on very vulnerable parents you imagine

893
00:37:41,550 --> 00:37:44,880
you've just had a baby you go in there

894
00:37:43,230 --> 00:37:46,559
and he says oh don't vaccinate because

895
00:37:44,880 --> 00:37:49,260
your child's going to get autism and I

896
00:37:46,559 --> 00:37:50,849
have its effect of alternatives so I

897
00:37:49,260 --> 00:37:53,850
actually wrote a report to the health

898
00:37:50,849 --> 00:37:54,929

minister and that went global that got

899

00:37:53,849 --> 00:37:57,779

mentioned in the British Medical Journal

900

00:37:54,929 --> 00:38:00,169

and I asked them to shut the

901

00:37:57,780 --> 00:38:02,940

chiropractic clinic down and investigate

902

00:38:00,170 --> 00:38:05,369

chiropractic in Australia and of course

903

00:38:02,940 --> 00:38:07,289

they did nothing they refer it on but

904

00:38:05,369 --> 00:38:09,119

even so at least that way it brought it

905

00:38:07,289 --> 00:38:10,829

out and suddenly pediatricians came out

906

00:38:09,119 --> 00:38:13,529

and very good chiropractic came at

907

00:38:10,829 --> 00:38:14,909

offering support me which I you know

908

00:38:13,530 --> 00:38:16,890

when I got one from a chiropractor lot

909

00:38:14,909 --> 00:38:19,379

always done for is no i said i'll offer

910

00:38:16,889 --> 00:38:21,089

you help you said i don't want us to be

911

00:38:19,380 --> 00:38:23,460

seen like this i want us to be seen the

912

00:38:21,090 --> 00:38:25,620

non-surgical back specialist not all

913
00:38:23,460 --> 00:38:27,750
this whoo-whoop stuff and then i found

914
00:38:25,619 --> 00:38:30,389
they were running courses teaching

915
00:38:27,750 --> 00:38:32,250
practicing chiropractors how to enlist

916
00:38:30,389 --> 00:38:34,289
local nurses

917
00:38:32,250 --> 00:38:36,929
to get most of their businesses to be

918
00:38:34,289 --> 00:38:40,829
children and babies this is manipulating

919
00:38:36,929 --> 00:38:42,269
newborn babies and they run semin these

920
00:38:40,829 --> 00:38:43,559
people the chiropractors are not

921
00:38:42,269 --> 00:38:45,630
vaccinated they don't have to be

922
00:38:43,559 --> 00:38:48,929
vaccinated and they would be running

923
00:38:45,630 --> 00:38:50,820
seminars after hours to tell the mothers

924
00:38:48,929 --> 00:38:52,349
and new mums and these poor women are so

925
00:38:50,820 --> 00:38:53,640
precious and their babies are so

926
00:38:52,349 --> 00:38:56,009
precious mixing with all these other

927
00:38:53,639 --> 00:38:58,379
babies and we've got rampant whooping

928
00:38:56,010 --> 00:39:00,870
cough my niece's wife just had a baby

929
00:38:58,380 --> 00:39:02,280
she was terrified the first six weeks

930
00:39:00,869 --> 00:39:04,440
her baby would catch whooping cough

931
00:39:02,280 --> 00:39:07,350
because she lives in a low vaccination

932
00:39:04,440 --> 00:39:09,840
area fortunately it didn't both of six

933
00:39:07,349 --> 00:39:12,719
weeks she should have been just enjoying

934
00:39:09,840 --> 00:39:14,309
motherhood I can imagine that dying baby

935
00:39:12,719 --> 00:39:17,159
fair don't yes oh I found out the guy

936
00:39:14,309 --> 00:39:20,039
that ran this course he stood down from

937
00:39:17,159 --> 00:39:21,719
RMIT and he moved to Queensland and is

938
00:39:20,039 --> 00:39:24,059
now setting up the central queensland

939
00:39:21,719 --> 00:39:26,849
university course chiropractic under a

940
00:39:24,059 --> 00:39:29,159
Bachelor of Science mind you laughing

941

00:39:26,849 --> 00:39:31,259
this year so I alerted the professor's

942
00:39:29,159 --> 00:39:34,529
that this was happening so they then

943
00:39:31,260 --> 00:39:36,060
enlisted 34th their colleagues and wrote

944
00:39:34,530 --> 00:39:38,790
a letter to the central Queensland

945
00:39:36,059 --> 00:39:42,570
University asking them to rethink this

946
00:39:38,789 --> 00:39:45,449
degree they then realized that 19 of our

947
00:39:42,570 --> 00:39:48,840
39 universities are running courses Kim

948
00:39:45,449 --> 00:39:50,460
to witchcraft voodoo often masquerading

949
00:39:48,840 --> 00:39:52,620
as science there's a lot of money in it

950
00:39:50,460 --> 00:39:55,760
even though I can't understand that this

951
00:39:52,619 --> 00:39:58,289
there's surely these controls that these

952
00:39:55,760 --> 00:40:00,540
charlatans are out there you know trying

953
00:39:58,289 --> 00:40:03,300
to make money out of basically basically

954
00:40:00,539 --> 00:40:05,610
nonsense no no control I put it

955
00:40:03,300 --> 00:40:07,050

complaint in against a Chinese

956

00:40:05,610 --> 00:40:09,630

practitioner claiming he could cure

957

00:40:07,050 --> 00:40:11,340

cancer on his website without a patient

958

00:40:09,630 --> 00:40:13,349

there's nothing they can do it won't

959

00:40:11,340 --> 00:40:15,930

hold up in court so they just said look

960

00:40:13,349 --> 00:40:17,460

just his opinion nothing they can do but

961

00:40:15,929 --> 00:40:19,919

there are no control so the one thing

962

00:40:17,460 --> 00:40:23,280

I've tried to do is ask the TGA to

963

00:40:19,920 --> 00:40:25,380

cancel a devices for example that you go

964

00:40:23,280 --> 00:40:27,810

you let you can go to your local natural

965

00:40:25,380 --> 00:40:30,119

therapist for a consultation which you

966

00:40:27,809 --> 00:40:32,849

can claim off your health fund the next

967

00:40:30,119 --> 00:40:34,319

thing you'll be on a machine which is a

968

00:40:32,849 --> 00:40:35,880

high-tech wizardry that's going to

969

00:40:34,320 --> 00:40:37,680

diagnose all that ails you your

970
00:40:35,880 --> 00:40:39,390
allergies your nutritional deficiencies

971
00:40:37,679 --> 00:40:41,339
and you'll stagger out the door with all

972
00:40:39,389 --> 00:40:43,619
these bottles of things because that's

973
00:40:41,340 --> 00:40:45,900
what they make their money on filling

974
00:40:43,619 --> 00:40:48,210
all the pills and potions and if I say

975
00:40:45,900 --> 00:40:49,920
you don't get better straight away they

976
00:40:48,210 --> 00:40:51,750
say look you know come on back so they

977
00:40:49,920 --> 00:40:53,159
people keep coming back for treatments

978
00:40:51,750 --> 00:40:56,760
that don't work spending an awful lot of

979
00:40:53,159 --> 00:40:58,409
money they don't have and they also know

980
00:40:56,760 --> 00:41:00,810
them on a first-name basis I hear them

981
00:40:58,409 --> 00:41:03,929
saying old Danny my kinesiologist you

982
00:41:00,809 --> 00:41:06,059
know or store my naturopath well your

983
00:41:03,929 --> 00:41:07,529
doctor can't do that the doctors in and

984
00:41:06,059 --> 00:41:09,299
out in six minutes and if they're longer

985
00:41:07,530 --> 00:41:11,580
than that then they're investigated by

986
00:41:09,300 --> 00:41:13,590
Medicare yes I can imagine you probably

987
00:41:11,579 --> 00:41:15,779
tried to be people probably tried to run

988
00:41:13,590 --> 00:41:17,460
you out of town oh well not something I

989
00:41:15,780 --> 00:41:19,200
tried to work from a basis of evidence

990
00:41:17,460 --> 00:41:21,659
so I kept you said to me I went to an

991
00:41:19,199 --> 00:41:23,549
acupuncturist and gone six sessions I

992
00:41:21,659 --> 00:41:25,019
will send you the research so you can

993
00:41:23,550 --> 00:41:27,360
make an informed choice it's not about

994
00:41:25,019 --> 00:41:28,860
what I think even though I do have an

995
00:41:27,360 --> 00:41:32,730
opinion after a couple of drinks offered

996
00:41:28,860 --> 00:41:34,590
and also Loretta I know people who you

997
00:41:32,730 --> 00:41:36,659
know they won't take the kids to the

998

00:41:34,590 --> 00:41:38,100
doctors that you always forever running

999
00:41:36,659 --> 00:41:40,379
to the naturopath there's a good natural

1000
00:41:38,099 --> 00:41:41,730
person I think I've been to natural

1001
00:41:40,380 --> 00:41:45,090
perhaps so you know I go every now and

1002
00:41:41,730 --> 00:41:46,409
again but I I sometimes thinks look look

1003
00:41:45,090 --> 00:41:48,720
if it's a cold and the child's not

1004
00:41:46,409 --> 00:41:50,549
getting any better go to the doctor

1005
00:41:48,719 --> 00:41:52,289
personal medicine that's right well an

1006
00:41:50,550 --> 00:41:54,480
extra pass can give you good nutritional

1007
00:41:52,289 --> 00:41:56,369
advice do they come out of university

1008
00:41:54,480 --> 00:41:58,019
this is what really stuns me there's

1009
00:41:56,369 --> 00:42:01,440
some really great courses that they

1010
00:41:58,019 --> 00:42:03,179
can't in a different subject the store

1011
00:42:01,440 --> 00:42:05,010
when they come out the temptation is

1012
00:42:03,179 --> 00:42:07,440

there's not a lot of money and just

1013

00:42:05,010 --> 00:42:09,840

giving advice and these like these

1014

00:42:07,440 --> 00:42:11,400

people that sell these machines they're

1015

00:42:09,840 --> 00:42:14,760

overseas machines so they've got

1016

00:42:11,400 --> 00:42:16,170

European Union certificates the TTA the

1017

00:42:14,760 --> 00:42:17,730

Therapeutic Goods Administration is the

1018

00:42:16,170 --> 00:42:19,590

regulator is obliged to take the

1019

00:42:17,730 --> 00:42:21,240

machines so the sponsors of these

1020

00:42:19,590 --> 00:42:23,250

machines will contact the naturopath

1021

00:42:21,239 --> 00:42:25,349

saying look here's a machine for 25,000

1022

00:42:23,250 --> 00:42:27,000

you can get a hundred thousand dollars a

1023

00:42:25,349 --> 00:42:28,679

year or in this machine they'll show

1024

00:42:27,000 --> 00:42:30,449

them how and they'll finance the machine

1025

00:42:28,679 --> 00:42:32,099

well if you're a naturopathic and you

1026

00:42:30,449 --> 00:42:34,319

think wow this is all legitimate easy

1027
00:42:32,099 --> 00:42:35,969
money yes I will do and how good am I to

1028
00:42:34,320 --> 00:42:37,769
my patients that I'm offering them all

1029
00:42:35,969 --> 00:42:39,989
these diagnostics and really all they

1030
00:42:37,769 --> 00:42:41,280
are is high-tech wizardry yeah that's

1031
00:42:39,989 --> 00:42:42,719
not the teeth whitening machines are

1032
00:42:41,280 --> 00:42:45,000
good out there as well isn't it yeah and

1033
00:42:42,719 --> 00:42:47,159
part of my problem is I can't often get

1034
00:42:45,000 --> 00:42:48,900
patients to come forward to have been

1035
00:42:47,159 --> 00:42:52,049
treated badly for cancer because they're

1036
00:42:48,900 --> 00:42:55,050
dead you look at Steve Jobs and we'll

1037
00:42:52,050 --> 00:42:57,570
CEO he went on homeopathy it didn't kill

1038
00:42:55,050 --> 00:42:59,340
him but he was quite favorable at the

1039
00:42:57,570 --> 00:42:59,910
beginning he was potentially curable he

1040
00:42:59,340 --> 00:43:01,890
had a unique

1041
00:42:59,909 --> 00:43:04,889
can't be cancer but even he admitted

1042
00:43:01,889 --> 00:43:07,139
he'd made a mistake and that's the

1043
00:43:04,889 --> 00:43:09,118
tragedy of it it's bad enough when and

1044
00:43:07,139 --> 00:43:10,500
that's the worst thing if people can be

1045
00:43:09,119 --> 00:43:12,660
saved and they do it I mean one of my

1046
00:43:10,500 --> 00:43:14,219
very good friends this was diagnosed a

1047
00:43:12,659 --> 00:43:16,379
year or two before me so I didn't know

1048
00:43:14,219 --> 00:43:19,318
much of that to cancer went on wheat

1049
00:43:16,380 --> 00:43:21,269
grass this is up the sunshine coast they

1050
00:43:19,318 --> 00:43:23,400
had diagnosed him accidentally with an

1051
00:43:21,269 --> 00:43:25,858
x-ray and it was a tiny lesion about

1052
00:43:23,400 --> 00:43:28,260
size of the five-cent coin and they

1053
00:43:25,858 --> 00:43:30,298
could have cured him no he died because

1054
00:43:28,260 --> 00:43:32,730
he went on the wheatgrass and even all

1055

00:43:30,298 --> 00:43:34,199
the ways tell him he's cured and by then

1056
00:43:32,730 --> 00:43:37,019
I was diagnosed and I thought well

1057
00:43:34,199 --> 00:43:39,029
that's good i don't understand it and of

1058
00:43:37,019 --> 00:43:41,429
course then he died a few months later

1059
00:43:39,030 --> 00:43:44,460
and i just have story after story

1060
00:43:41,429 --> 00:43:46,259
usually from families loved ones saying

1061
00:43:44,460 --> 00:43:48,210
you know my sister went and she did this

1062
00:43:46,260 --> 00:43:49,890
and i went along with her and it was

1063
00:43:48,210 --> 00:43:52,318
really cool you know bone start

1064
00:43:49,889 --> 00:43:53,670
dissolving and awful you know sis cancer

1065
00:43:52,318 --> 00:43:55,349
spreads and they still going to the home

1066
00:43:53,670 --> 00:43:57,000
you pack and all them but that was it

1067
00:43:55,349 --> 00:44:00,269
the homeopath told me he could cure me

1068
00:43:57,000 --> 00:44:03,150
this was one algester he could keep that

1069
00:44:00,269 --> 00:44:04,949

was undercover again and he could kill

1070

00:44:03,150 --> 00:44:06,690

me of cancer with homeopathy we sit you

1071

00:44:04,949 --> 00:44:09,298

know the memory of a flower and some

1072

00:44:06,690 --> 00:44:12,358

other you know and also a cancer cell

1073

00:44:09,298 --> 00:44:14,309

the memory of a cancer cell and so we

1074

00:44:12,358 --> 00:44:16,440

were able to take those product with us

1075

00:44:14,309 --> 00:44:18,539

but this is the guy telling me not to

1076

00:44:16,440 --> 00:44:19,798

have cancer treatment cuz i could

1077

00:44:18,539 --> 00:44:22,528

legitimately say I've being diagnosed

1078

00:44:19,798 --> 00:44:24,358

with breast cancer what can you do for

1079

00:44:22,528 --> 00:44:27,630

me and that's you know because I'm not

1080

00:44:24,358 --> 00:44:29,519

very good at line so and that's why they

1081

00:44:27,630 --> 00:44:31,430

like me to go undercover but my cover

1082

00:44:29,519 --> 00:44:33,659

could be blown there I think it might be

1083

00:44:31,429 --> 00:44:37,440

great thanks for talking to talk again

1084
00:44:33,659 --> 00:44:39,598
soon I website at wwlp.com data you

1085
00:44:37,440 --> 00:44:41,309
that's health information one word it

1086
00:44:39,599 --> 00:44:43,980
doesn't sell anything doesn't advertise

1087
00:44:41,309 --> 00:44:45,720
just over 400 very good link so people

1088
00:44:43,980 --> 00:44:47,190
can have a look missing father was the

1089
00:44:45,719 --> 00:44:48,989
two supporters like Professor Ian phrase

1090
00:44:47,190 --> 00:44:50,010
or at least 30 order of Australian so

1091
00:44:48,989 --> 00:44:51,509
well thanks for talking to us we'll talk

1092
00:44:50,010 --> 00:44:53,190
again soon Loretta good on you thank you

1093
00:44:51,510 --> 00:44:56,869
Liberty Marin there the inaugural chief

1094
00:44:53,190 --> 00:44:56,869
executive officer of friends of science

1095
00:45:07,059 --> 00:45:13,069
have you heard about QED the exciting

1096
00:45:10,369 --> 00:45:15,528
skeptical conference 10 11 4 March 2012

1097
00:45:13,068 --> 00:45:17,808
quite exciting days you're probably

1098
00:45:15,528 --> 00:45:19,998
wondering why should i go to QED while

1099
00:45:17,809 --> 00:45:21,798
the existential dilemma will have the

1100
00:45:19,998 --> 00:45:23,448
investigator and legend joe nickell

1101
00:45:21,798 --> 00:45:25,579
quite extraordinary detective

1102
00:45:23,449 --> 00:45:28,188
alternative medicine expert Ed's orders

1103
00:45:25,579 --> 00:45:29,929
quacks in Deward difficulties monsters

1104
00:45:28,188 --> 00:45:32,199
werewolves and lucid dreaming from

1105
00:45:29,929 --> 00:45:34,668
Deborah high working eerie demons

1106
00:45:32,199 --> 00:45:37,309
Massimo polidoro head of the

1107
00:45:34,668 --> 00:45:39,108
intelligence questo agrees yogurt or a

1108
00:45:37,309 --> 00:45:42,019
tape it or an eviction conspiracy

1109
00:45:39,108 --> 00:45:44,568
theories ytb doubles secular campaign of

1110
00:45:42,018 --> 00:45:46,278
Miriam namazi well equality detractors

1111
00:45:44,568 --> 00:45:48,108
Sarah angliss will show us how to play

1112

00:45:46,278 --> 00:45:50,989
the Federman with robots withering

1113
00:45:48,108 --> 00:45:53,268
electronic devices ufologist II and red

1114
00:45:50,989 --> 00:45:55,188
path with extraterrestrial details there

1115
00:45:53,268 --> 00:45:56,928
fester Steve Jones and white creationism

1116
00:45:55,188 --> 00:45:58,699
is known to quieten evolution deniers

1117
00:45:56,929 --> 00:46:01,009
podcaster and spoon bender Richard

1118
00:45:58,699 --> 00:46:03,079
Saunders questions ESP demonstrations

1119
00:46:01,009 --> 00:46:05,418
for a filia Benson Queen existentialist

1120
00:46:03,079 --> 00:46:07,519
debater and we'll have comedy from Robin

1121
00:46:05,418 --> 00:46:09,558
Ince and gas quality into tim and

1122
00:46:07,518 --> 00:46:11,508
definitely tickets are 89 pounds and

1123
00:46:09,559 --> 00:46:15,439
they're going fast so re queue everybody

1124
00:46:11,509 --> 00:46:18,398
directly would you cut that out you can

1125
00:46:15,438 --> 00:46:21,678
get your ticket from QED calm dot org

1126
00:46:18,398 --> 00:46:23,538

court events dorm in marsh seriously if

1127

00:46:21,679 --> 00:46:26,179

you don't stop bangin up too quickly end

1128

00:46:23,539 --> 00:46:29,079

discussion comes QED Manchester question

1129

00:46:26,179 --> 00:46:29,079

explore discover

1130

00:46:43,710 --> 00:46:50,980

thank you for listening to this episode

1131

00:46:46,420 --> 00:46:54,190

of the skeptic zone now to whet your

1132

00:46:50,980 --> 00:46:57,099

appetite there are more there has been

1133

00:46:54,190 --> 00:47:00,460

more developments in Ian Bryce's

1134

00:46:57,099 --> 00:47:03,099

investigation into the e-cat cold fusion

1135

00:47:00,460 --> 00:47:05,440

type technology it's a little bit under

1136

00:47:03,099 --> 00:47:09,400

wraps now means further investigations

1137

00:47:05,440 --> 00:47:11,679

as soon as we can as soon as we can

1138

00:47:09,400 --> 00:47:14,039

we'll be telling you more about this

1139

00:47:11,679 --> 00:47:16,929

fascinating story this interesting

1140

00:47:14,039 --> 00:47:19,960

investigation so look out for that and

1141
00:47:16,929 --> 00:47:23,619
look out for next week's skeptic zone

1142
00:47:19,960 --> 00:47:26,320
where we will be visiting the National

1143
00:47:23,619 --> 00:47:28,420
Center for Science Education which is in

1144
00:47:26,320 --> 00:47:30,850
open not far away from where i am at the

1145
00:47:28,420 --> 00:47:34,389
moment and to talk to our dear friend

1146
00:47:30,849 --> 00:47:36,639
dr. Eugenie Scott about her efforts and

1147
00:47:34,389 --> 00:47:39,879
the center's efforts into helping

1148
00:47:36,639 --> 00:47:43,929
preserve science education by fighting

1149
00:47:39,880 --> 00:47:47,170
the attempts by creationists to insert

1150
00:47:43,929 --> 00:47:49,960
then drove all into the American school

1151
00:47:47,170 --> 00:47:53,170
system can't wait for that going to be

1152
00:47:49,960 --> 00:47:54,970
visiting that Center in a few days well

1153
00:47:53,170 --> 00:47:58,030
I think it's time for another hot

1154
00:47:54,969 --> 00:48:00,339
chocolate yeah why not and thank you

1155
00:47:58,030 --> 00:48:03,940
once again for listening to this week's

1156
00:48:00,340 --> 00:48:05,740
episode of the skeptic zone until next

1157
00:48:03,940 --> 00:48:08,559
week this is Richard Saunders signing

1158
00:48:05,739 --> 00:48:13,859
off looking for my rowboat signing off

1159
00:48:08,559 --> 00:48:13,860
from the Bay Area San Francisco USA

1160
00:48:15,599 --> 00:48:23,019
you've been listening to the skeptic

1161
00:48:18,010 --> 00:48:26,800
zone visit our website at [www skeptics](http://www.skeptics)

1162
00:48:23,019 --> 00:48:29,730
on TV the comments contacts and extra

1163
00:48:26,800 --> 00:48:29,730
video reports