



Dr Rob Morrison

The Skeptic Zone

Show 164 - 10 Dec. 2011

1
00:00:24,820 --> 00:00:09,110
welcome to the skeptic zone the podcast

2
00:00:31,370 --> 00:00:27,769
hello and welcome to the skeptic zone

3
00:00:34,190 --> 00:00:31,380
episode number 106 put that away it's

4
00:00:36,680 --> 00:00:34,200
not Christmas yet episode number 164

5
00:00:39,440 --> 00:00:36,690
although I can't wait oh I like

6
00:00:41,209 --> 00:00:39,450
Christmas it's good fun good fun buying

7
00:00:45,770 --> 00:00:41,219
lots of presence at the moment for all

8
00:00:48,020 --> 00:00:45,780
the nieces and nephews I got a wonderful

9
00:00:50,600 --> 00:00:48,030
book I'm like I guess science

10
00:00:53,779 --> 00:00:50,610
experiments for my one of my nephew's I

11
00:00:55,670 --> 00:00:53,789
think he's going to enjoy that is having

12
00:00:58,849 --> 00:00:55,680
a skeptic for an uncle there you go

13
00:01:02,900 --> 00:00:58,859

episode number 164 for the tenth of

14
00:01:05,690 --> 00:01:02,910
December 2011 Richard Saunders here from

15
00:01:07,310 --> 00:01:05,700
Sydney Australia today on the show we're

16
00:01:10,760 --> 00:01:07,320
going to be talking with dr. Rob

17
00:01:12,440 --> 00:01:10,770
Morrison now dr. Morrison Australians

18
00:01:15,590 --> 00:01:12,450
will remember was one of the guys in the

19
00:01:17,480 --> 00:01:15,600
curiosity show a fabulous science show

20
00:01:20,420 --> 00:01:17,490
for kids and how to make things and how

21
00:01:23,240 --> 00:01:20,430
to do things in years past speaking to

22
00:01:25,820 --> 00:01:23,250
him today about an article he wrote for

23
00:01:29,420 --> 00:01:25,830
the punch online the punch calm today

24
00:01:33,080 --> 00:01:29,430
you entitled this is the dawning of the

25
00:01:37,120 --> 00:01:33,090
new age of superstition he's quite

26
00:01:40,580 --> 00:01:37,130
worried about the encroaching quackery

27
00:01:42,440 --> 00:01:40,590
quackery and particularly worried about

28
00:01:45,280 --> 00:01:42,450
the chiropractor's that's coming up

29
00:01:47,569 --> 00:01:45,290
first interview on today's show

30
00:01:50,870 --> 00:01:47,579
following that we've got a very strange

31
00:01:54,770 --> 00:01:50,880
saved segment sent to me by someone

32
00:01:56,810 --> 00:01:54,780
claiming to be Brian doughnut not sure

33
00:01:59,719 --> 00:01:56,820
about this one but I think thought I'd

34
00:02:01,999 --> 00:01:59,729
better play it yeah segment coming up

35
00:02:04,780 --> 00:02:02,009
with Brian doughnut it's in the middle

36
00:02:06,889 --> 00:02:04,790
of the show and to wrap up the show I

37
00:02:08,479 --> 00:02:06,899
interviewed at a good old friend of mine

38
00:02:11,600 --> 00:02:08,489

and a good friend of the skeptics own

39

00:02:13,300 --> 00:02:11,610

doctor Paul Willis dr. Paul Willis who

40

00:02:15,580 --> 00:02:13,310

until recently was

41

00:02:18,339 --> 00:02:15,590

one of the front men of the ABC TV

42

00:02:21,520 --> 00:02:18,349

science show catalyst now he's working

43

00:02:24,790 --> 00:02:21,530

at the Royal Institution of Australia in

44

00:02:28,030 --> 00:02:24,800

Adelaide bringing science to people and

45

00:02:29,979 --> 00:02:28,040

people to science is their motto we're

46

00:02:33,509 --> 00:02:29,989

going to find out what he's been up to

47

00:02:37,720 --> 00:02:33,519

and the work of the institution and

48

00:02:41,229 --> 00:02:37,730

speaking of maynard which we weren't may

49

00:02:43,449 --> 00:02:41,239

not as you know is going to be at tam 10

50

00:02:47,289 --> 00:02:43,459

in las vegas well that's the hope that's

51
00:02:50,080 --> 00:02:47,299
the plan tam or bust las vegas or bust

52
00:02:52,360 --> 00:02:50,090
for me nod if you want to help Maynard

53
00:02:53,979 --> 00:02:52,370
you can always simply chip into the

54
00:02:55,900 --> 00:02:53,989
skeptical zone because a lot of that money

55
00:03:01,050 --> 00:02:55,910
will go to help may not get that plane

56
00:03:06,759 --> 00:03:01,060
ticket or you can bid on Maynard's

57
00:03:10,900 --> 00:03:06,769
classics 95 to 2000 double CD set along

58
00:03:13,089 --> 00:03:10,910
with a signed copy of skip tied 3 by

59
00:03:15,670 --> 00:03:13,099
Brian Dunning signed by Brian Dunning

60
00:03:18,130 --> 00:03:15,680
and yours truly Richard Saunders because

61
00:03:20,800 --> 00:03:18,140
I wrote the foreword both those items

62
00:03:23,349 --> 00:03:20,810
are up for bid as a sort of double set

63
00:03:26,199 --> 00:03:23,359

now if you follow the links from the

64

00:03:27,550 --> 00:03:26,209

skeptics own web page or you subscribe

65

00:03:30,190 --> 00:03:27,560

to our newsletter you can easily click

66

00:03:32,979 --> 00:03:30,200

on the links there or if you go to ebay

67

00:03:36,759 --> 00:03:32,989

just run a search for Maynard classics

68

00:03:38,710 --> 00:03:36,769

and skipped I'd three autographed by

69

00:03:40,660 --> 00:03:38,720

Maynard Dunning and Saunders yes

70

00:03:43,270 --> 00:03:40,670

everything's autographed Maynard's

71

00:03:47,530 --> 00:03:43,280

double CD sets autographed by Maynard

72

00:03:50,550 --> 00:03:47,540

and skip tides autographed by Brian and

73

00:03:56,680 --> 00:03:50,560

myself that's how you can help may not

74

00:03:58,180 --> 00:03:56,690

get to Tam in Las Vegas it's always a

75

00:04:01,180 --> 00:03:58,190

plane flying over when i'm recording

76

00:04:04,059 --> 00:04:01,190

this folks like i live near the flight

77

00:04:06,910 --> 00:04:04,069

path and it's quiet all day all day I

78

00:04:10,120 --> 00:04:06,920

price you and i start to record for the

79

00:04:13,449 --> 00:04:10,130

skeptic zone and something there's one

80

00:04:15,190 --> 00:04:13,459

now I think it's really gone it's still

81

00:04:17,620 --> 00:04:15,200

there maybe it's circling maybe they

82

00:04:22,060 --> 00:04:17,630

knew I was doing this I'm going to go

83

00:04:23,440 --> 00:04:22,070

away and ponder that I am and I'm not

84

00:04:26,629 --> 00:04:23,450

even going to have a drink this week

85

00:04:28,879 --> 00:04:26,639

because I'm that sort of guy

86

00:04:31,369 --> 00:04:28,889

you can go why don't you all run

87

00:04:35,059 --> 00:04:31,379

downstairs grab a drink of your favorite

88

00:04:58,270 --> 00:04:35,069

whatever it is run back upstairs and we

89

00:05:04,400 --> 00:05:01,670

and we have dr. Rob Morrison on the line

90

00:05:07,190 --> 00:05:04,410

now hello Rob great hi yeah I'm doing

91

00:05:09,650 --> 00:05:07,200

really well so it seems a bit of a

92

00:05:11,750 --> 00:05:09,660

hornet's nest has been stirred up with

93

00:05:14,600 --> 00:05:11,760

the article which has been published at

94

00:05:18,050 --> 00:05:14,610

the punch calm day you by yourself

95

00:05:20,870 --> 00:05:18,060

entitled this is the dawning of the new

96

00:05:25,160 --> 00:05:20,880

age of superstition and of course the

97

00:05:29,270 --> 00:05:25,170

the thrust of your whole piece on the

98

00:05:31,700 --> 00:05:29,280

punch there is how non-science is not

99

00:05:33,530 --> 00:05:31,710

just creeping into the door and sort of

100

00:05:35,410 --> 00:05:33,540

here already in making itself at home

101
00:05:38,390 --> 00:05:35,420
especially when it comes to medical care

102
00:05:40,340 --> 00:05:38,400
yes i must say that wasn't my title when

103
00:05:42,980 --> 00:05:40,350
i submitted at my title was check your

104
00:05:46,040 --> 00:05:42,990
medical [h__h] meter that they changed

105
00:05:48,590 --> 00:05:46,050
it to for some reason but there was

106
00:05:51,200 --> 00:05:48,600
indeed rust of it it's it's it's a

107
00:05:53,770 --> 00:05:51,210
worrying development oh it's it's not

108
00:05:56,570 --> 00:05:53,780
only the non-science is creeping into

109
00:05:59,570 --> 00:05:56,580
areas which rightfully ought to be

110
00:06:02,510 --> 00:05:59,580
scientific yeah it's that the people who

111
00:06:05,510 --> 00:06:02,520
are practicing lee is well they claim

112
00:06:08,630 --> 00:06:05,520
that their own serve alternative pursuit

113
00:06:10,430 --> 00:06:08,640

is fine and nonetheless as quickly as

114

00:06:12,200 --> 00:06:10,440

they can adopting the trappings of

115

00:06:15,490 --> 00:06:12,210

science to give themselves a spurious

116

00:06:18,740 --> 00:06:15,500

respectability witness than the

117

00:06:21,230 --> 00:06:18,750

chiropractor's arms LaVon government so

118

00:06:23,750 --> 00:06:21,240

they can now call themselves ophtho yeah

119

00:06:25,640 --> 00:06:23,760

and this is a very very good example

120

00:06:27,170 --> 00:06:25,650

actually that you've brought up here

121

00:06:29,840 --> 00:06:27,180

with the chiropractors and I know it's

122

00:06:32,420 --> 00:06:29,850

it's one of the main arguments or what

123

00:06:36,080 --> 00:06:32,430

main features of the piece you've

124

00:06:39,680 --> 00:06:36,090

written is to the vast majority of the

125

00:06:42,560 --> 00:06:39,690

public I daresay regard chiropractic as

126
00:06:46,400 --> 00:06:42,570
another legitimate branch of the medical

127
00:06:48,830 --> 00:06:46,410
profession and and it's a troubling one

128
00:06:51,530 --> 00:06:48,840
because of course chiropractic itself is

129
00:06:53,690 --> 00:06:51,540
split into two camps there's the one

130
00:06:55,750 --> 00:06:53,700
which the kind of is the kind of

131
00:06:58,559 --> 00:06:55,760
Orthodox one which goes in full

132
00:07:02,159 --> 00:06:58,569
subluxation and mystical

133
00:07:04,909 --> 00:07:02,169
for most spiritual stuff about what

134
00:07:08,579 --> 00:07:04,919
happens in the spine and it's completely

135
00:07:09,929 --> 00:07:08,589
untestable and the other group they they

136
00:07:11,760 --> 00:07:09,939
don't go in for that and they are much

137
00:07:14,760 --> 00:07:11,770
more interested in the kind of physical

138
00:07:16,049 --> 00:07:14,770

aspect of manipulating the spine but of

139

00:07:18,299 --> 00:07:16,059

course if you keep going down that route

140

00:07:20,549 --> 00:07:18,309

and you're good at it you might as well

141

00:07:23,760 --> 00:07:20,559

be a physiotherapist what's the need for

142

00:07:27,600 --> 00:07:23,770

another pursuit which has its basis all

143

00:07:30,239 --> 00:07:27,610

this nonsensical kind of mystical carry

144

00:07:31,559 --> 00:07:30,249

on yes and that's that's absolutely

145

00:07:35,219 --> 00:07:31,569

right and of course this is the point

146

00:07:36,809 --> 00:07:35,229

which the again I used the term the

147

00:07:40,439 --> 00:07:36,819

majority of the public I think that is

148

00:07:43,559 --> 00:07:40,449

the case they simply do not know that

149

00:07:47,570 --> 00:07:43,569

there is this area of chiropractic which

150

00:07:51,359 --> 00:07:47,580

is basically based on magical thinking

151
00:07:54,839 --> 00:07:51,369
and it's more than that I mean there are

152
00:07:56,579 --> 00:07:54,849
some good spinal manipulators amongst

153
00:07:58,829 --> 00:07:56,589
the chiropractics I wouldn't deny that

154
00:08:01,379 --> 00:07:58,839
and some of them are good at treating

155
00:08:02,909 --> 00:08:01,389
what they do but if they are good at

156
00:08:06,629 --> 00:08:02,919
treating what they do because they're

157
00:08:08,969 --> 00:08:06,639
manipulating bones and joints just as

158
00:08:10,829 --> 00:08:08,979
bones and joints why not call of that

159
00:08:14,219 --> 00:08:10,839
why dress it up as something which is

160
00:08:18,899 --> 00:08:14,229
really really has its roots in something

161
00:08:20,670 --> 00:08:18,909
which is deeply unscientific and also

162
00:08:22,769 --> 00:08:20,680
goes long and things like this are

163
00:08:25,139 --> 00:08:22,779

chiropractic website to say they can

164

00:08:28,649 --> 00:08:25,149

cure ninety-five percent of illnesses

165

00:08:31,439 --> 00:08:28,659

and in a tackle they say oh we don't

166

00:08:33,209 --> 00:08:31,449

really believe that but you know there's

167

00:08:35,339 --> 00:08:33,219

no clear indication that they're backing

168

00:08:38,219 --> 00:08:35,349

away from it certainly is a body and

169

00:08:40,679 --> 00:08:38,229

they're promoting the fact that they

170

00:08:43,110 --> 00:08:40,689

want to be considered in in the

171

00:08:46,470 --> 00:08:43,120

forefront of health care and that's

172

00:08:48,210 --> 00:08:46,480

right and this word crops up again and

173

00:08:50,069 --> 00:08:48,220

again when I'm looking at these sort of

174

00:08:55,110 --> 00:08:50,079

people in their views is the word

175

00:08:58,110 --> 00:08:55,120

wellness yes what is peculiar and it's a

176
00:09:00,090 --> 00:08:58,120
difficult issue because you know I'm not

177
00:09:01,620 --> 00:09:00,100
and I think others are not saying you

178
00:09:04,340 --> 00:09:01,630
shouldn't go and see them by all means

179
00:09:06,750 --> 00:09:04,350
go and see them our protest is that

180
00:09:08,429 --> 00:09:06,760
science has a very different meaning

181
00:09:11,189 --> 00:09:08,439
science isn't the body of knowledge

182
00:09:12,060 --> 00:09:11,199
which is sort of right or wrong science

183
00:09:15,750 --> 00:09:12,070
is a way

184
00:09:18,360 --> 00:09:15,760
testing any claim whether it's weathers

185
00:09:20,460 --> 00:09:18,370
physiotherapy or medicine or drugs or

186
00:09:23,490 --> 00:09:20,470
nothing it's actually a system by which

187
00:09:27,330 --> 00:09:23,500
you can weed out and test what is

188
00:09:29,520 --> 00:09:27,340

asserted now it of course like democracy

189

00:09:31,110 --> 00:09:29,530

is not perfect in that some people will

190

00:09:33,720 --> 00:09:31,120

get one result and some will get another

191

00:09:35,700 --> 00:09:33,730

but the thing is self-regulating in that

192

00:09:37,260 --> 00:09:35,710

you if you get people who run the same

193

00:09:39,450 --> 00:09:37,270

experiment and they get results that

194

00:09:41,400 --> 00:09:39,460

disagree you've got to sort that out so

195

00:09:43,950 --> 00:09:41,410

the thing is constantly refining itself

196

00:09:46,230 --> 00:09:43,960

towards what is accurate now then what

197

00:09:50,160 --> 00:09:46,240

science is it's a method of testing

198

00:09:52,140 --> 00:09:50,170

assertion but to be testable you've got

199

00:09:54,090 --> 00:09:52,150

to be able to be framed in a way that is

200

00:09:57,720 --> 00:09:54,100

testable and it's not testable for

201
00:10:00,180 --> 00:09:57,730
example to say God exists he may or may

202
00:10:02,820 --> 00:10:00,190
not but you can't test it empirically so

203
00:10:05,040 --> 00:10:02,830
it's not a scientific statement and you

204
00:10:07,260 --> 00:10:05,050
certainly can test whether or not a drug

205
00:10:08,970 --> 00:10:07,270
works because you set up clinical trials

206
00:10:11,220 --> 00:10:08,980
and you run experiments and you to find

207
00:10:13,170 --> 00:10:11,230
out that way that's scientific but you

208
00:10:15,780 --> 00:10:13,180
can't test whether somebody's got a kind

209
00:10:18,840 --> 00:10:15,790
of mystical force in the backbone which

210
00:10:20,910 --> 00:10:18,850
directed by certain procedures will

211
00:10:23,610 --> 00:10:20,920
cause this or that effect it's just not

212
00:10:26,430 --> 00:10:23,620
testable so it's inherently an

213
00:10:29,660 --> 00:10:26,440

unscientific practice if you cannot set

214

00:10:32,130 --> 00:10:29,670

up a testable hypothesis which of course

215

00:10:36,690 --> 00:10:32,140

happens again and again and we can even

216

00:10:39,200 --> 00:10:36,700

think about the other vaguely labeled

217

00:10:41,940 --> 00:10:39,210

Eastern modalities which talk about

218

00:10:44,070 --> 00:10:41,950

various types of energy and I think you

219

00:10:46,080 --> 00:10:44,080

make the point in your article that the

220

00:10:48,900 --> 00:10:46,090

word energy is certainly not used in any

221

00:10:50,850 --> 00:10:48,910

meaningful sense 200 that's gonna be

222

00:10:54,300 --> 00:10:50,860

sort of a very catch phrase I used to be

223

00:10:55,770 --> 00:10:54,310

vibrations yes but you know the end of

224

00:10:58,200 --> 00:10:55,780

people talking about the energy to get

225

00:11:00,660 --> 00:10:58,210

from crystal oh what what damned energy

226

00:11:03,030 --> 00:11:00,670

is a sound light and it's just it's a

227

00:11:05,190 --> 00:11:03,040

nonsense phrase and it's also an

228

00:11:08,190 --> 00:11:05,200

untestable phrase so therefore it's

229

00:11:10,620 --> 00:11:08,200

Nonsuch and my quarrel with these things

230

00:11:14,040 --> 00:11:10,630

is that they say well you can't test it

231

00:11:15,870 --> 00:11:14,050

and it's true and decides it's that's

232

00:11:18,870 --> 00:11:15,880

not what determines what science is I

233

00:11:21,780 --> 00:11:18,880

mean to say that the world is flat is a

234

00:11:24,690 --> 00:11:21,790

more scientific statement than to say

235

00:11:25,220 --> 00:11:24,700

subluxation cause of mystical forces to

236

00:11:27,350 --> 00:11:25,230

do things

237

00:11:29,750 --> 00:11:27,360

you better because you can taste with

238

00:11:31,670 --> 00:11:29,760

all the world is flat no so it's a

239

00:11:34,130 --> 00:11:31,680

scientific statement although it's wrong

240

00:11:38,060 --> 00:11:34,140

because it is amenable to testing by

241

00:11:40,460 --> 00:11:38,070

science yeah but if I say you know my

242

00:11:42,260 --> 00:11:40,470

dog knows what I'm thinking it's really

243

00:11:43,550 --> 00:11:42,270

not testable so it's not a scientific

244

00:11:45,800 --> 00:11:43,560

statement or where it may be true

245

00:11:48,560 --> 00:11:45,810

another point you're you're bringing up

246

00:11:51,620 --> 00:11:48,570

of course is these people that seem to

247

00:11:53,950 --> 00:11:51,630

be gaining somewhat more acceptance

248

00:11:57,080 --> 00:11:53,960

especially when they can call themselves

249

00:12:00,350 --> 00:11:57,090

doctor yes and that that's worrying

250

00:12:03,680 --> 00:12:00,360

because it's like it's likely anti

251
00:12:05,210 --> 00:12:03,690
evolutionists now by all means believe

252
00:12:06,770 --> 00:12:05,220
that but if you're going to believe that

253
00:12:09,290 --> 00:12:06,780
don't go around calling yourself a

254
00:12:11,540 --> 00:12:09,300
creation scientist because at the same

255
00:12:13,670 --> 00:12:11,550
time as you are denying the validity of

256
00:12:16,730 --> 00:12:13,680
what science tells you and that's

257
00:12:18,830 --> 00:12:16,740
evolution you are nonetheless wanting to

258
00:12:22,220 --> 00:12:18,840
assume its respectability by taking its

259
00:12:24,020 --> 00:12:22,230
name and it's a bastardization of a word

260
00:12:26,240 --> 00:12:24,030
science to apply it to stuff which is

261
00:12:28,670 --> 00:12:26,250
inherently unscientific now the same way

262
00:12:31,430 --> 00:12:28,680
I think if you are going to be

263
00:12:34,430 --> 00:12:31,440

non-orthodox and deny the scientific

264

00:12:37,340 --> 00:12:34,440

processes that medicine and pharmacology

265

00:12:40,610 --> 00:12:37,350

and physiotherapy however imperfectly

266

00:12:43,460 --> 00:12:40,620

must eventually wrist upon if you can't

267

00:12:45,140 --> 00:12:43,470

deny those don't then assume the

268

00:12:48,770 --> 00:12:45,150

trappings of wanting to call yourself

269

00:12:52,250 --> 00:12:48,780

doctor yeah and it's the studies of

270

00:12:54,530 --> 00:12:52,260

parasitism of Orthodoxy whilst at the

271

00:12:57,500 --> 00:12:54,540

same time denying that orthodoxy has the

272

00:12:59,570 --> 00:12:57,510

answers that he's wearing and it also is

273

00:13:01,460 --> 00:12:59,580

confusing because people in the general

274

00:13:03,170 --> 00:13:01,470

public go along and they see somebody

275

00:13:05,090 --> 00:13:03,180

called doctor and they don't know now if

276

00:13:09,440 --> 00:13:05,100

they're dealing with a somebody's got a

277

00:13:12,520 --> 00:13:09,450

PhD in oh it is a dentist or a vase or a

278

00:13:16,150 --> 00:13:12,530

chiropractor or a plumber the self

279

00:13:18,380 --> 00:13:16,160

awarded title to give yourself the

280

00:13:21,920 --> 00:13:18,390

respectability that other people have

281

00:13:23,600 --> 00:13:21,930

earned is I think an improper one and as

282

00:13:25,640 --> 00:13:23,610

you point out in your article of course

283

00:13:27,980 --> 00:13:25,650

that there this has been a long struggle

284

00:13:29,900 --> 00:13:27,990

politically for the chiropractor's

285

00:13:32,510 --> 00:13:29,910

whereas a real doctor has a long

286

00:13:34,820 --> 00:13:32,520

struggle academically to actually learn

287

00:13:36,770 --> 00:13:34,830

the disciplines well that's right it's a

288

00:13:38,750 --> 00:13:36,780

meaningful academic term it is slightly

289

00:13:42,080 --> 00:13:38,760

bedeviled i might say by the fact

290

00:13:44,720 --> 00:13:42,090

those who have a PhD which is a non

291

00:13:46,880 --> 00:13:44,730

medical degree are legitimately doctors

292

00:13:48,470 --> 00:13:46,890

because that's a doctorate whereas

293

00:13:50,750 --> 00:13:48,480

doctors it's actually it's actually

294

00:13:54,470 --> 00:13:50,760

occurred yet courtesy title a medical

295

00:13:57,680 --> 00:13:54,480

doctor has easily a Bachelor of surgery

296

00:14:01,340 --> 00:13:57,690

and a bachelor of medicine but no actual

297

00:14:03,440 --> 00:14:01,350

doctorate we do accept the doctor is a

298

00:14:04,970 --> 00:14:03,450

title used for Medicaid but it's not

299

00:14:08,720 --> 00:14:04,980

helped by broadening it into almost

300

00:14:11,210 --> 00:14:08,730

everything under the Sun I guess in a in

301
00:14:13,310 --> 00:14:11,220
a way it's it's a similar sort of thing

302
00:14:15,980 --> 00:14:13,320
that happens that when one walks into a

303
00:14:18,950 --> 00:14:15,990
pharmacy and looks at the shelf and can

304
00:14:20,690 --> 00:14:18,960
pick up a box of magic pills because

305
00:14:22,190 --> 00:14:20,700
you're in the pharmacy you there is a

306
00:14:25,340 --> 00:14:22,200
certain assumption on your part that

307
00:14:27,590 --> 00:14:25,350
they must be well they must work in some

308
00:14:31,820 --> 00:14:27,600
as well yes and that's a very good point

309
00:14:34,040 --> 00:14:31,830
because in fact yeah and they've been

310
00:14:36,050 --> 00:14:34,050
criticized for in fact bundling some of

311
00:14:39,080 --> 00:14:36,060
the alternative and now demonstrably

312
00:14:42,440 --> 00:14:39,090
harmful so-called natural mirror

313
00:14:43,970 --> 00:14:42,450

remedies some have been demonstrated to

314

00:14:45,790 --> 00:14:43,980

be sour harmful some of them are

315

00:14:49,240 --> 00:14:45,800

certainly harmful if they're taken

316

00:14:52,370 --> 00:14:49,250

wrongly and some of them are completely

317

00:14:54,740 --> 00:14:52,380

ineffective but there they sit alongside

318

00:14:57,500 --> 00:14:54,750

the prescription counter and there's no

319

00:14:59,210 --> 00:14:57,510

distinction made and and I mean I've

320

00:15:02,120 --> 00:14:59,220

done pharmacology and I have trouble

321

00:15:04,550 --> 00:15:02,130

sometimes working out what's legitimize

322

00:15:06,680 --> 00:15:04,560

not so god knows how you get on if you

323

00:15:09,020 --> 00:15:06,690

haven't done any you are at the mercy

324

00:15:11,090 --> 00:15:09,030

and that's probably a little harsh way

325

00:15:12,980 --> 00:15:11,100

how should turn to use a harsh way to

326

00:15:15,080 --> 00:15:12,990

say it you're at the mercy of the person

327

00:15:16,940 --> 00:15:15,090

behind the counter if you go in there

328

00:15:19,880 --> 00:15:16,950

and asking for advice and I can tell you

329

00:15:22,190 --> 00:15:19,890

from firsthand experience that that's a

330

00:15:24,500 --> 00:15:22,200

crapshoot you get a mixed bag either

331

00:15:26,210 --> 00:15:24,510

I've had the advice from somebody

332

00:15:29,630 --> 00:15:26,220

working in a pharmacy that homeopathy

333

00:15:31,700 --> 00:15:29,640

works by metaphysics and well luckily I

334

00:15:33,740 --> 00:15:31,710

know what I what's what in this

335

00:15:36,500 --> 00:15:33,750

situation but Dysart's a mother walking

336

00:15:37,820 --> 00:15:36,510

in with a crying baby or someone looking

337

00:15:39,110 --> 00:15:37,830

for some medicine for their sick

338

00:15:41,090 --> 00:15:39,120

children or whatever the case may be

339

00:15:43,190 --> 00:15:41,100

they literally they're at the mercy of

340

00:15:45,070 --> 00:15:43,200

somebody behind the desk who may not

341

00:15:48,140 --> 00:15:45,080

know what the hell they're talking about

342

00:15:48,740 --> 00:15:48,150

that can also be a problem with other

343

00:15:52,070 --> 00:15:48,750

author

344

00:15:53,510 --> 00:15:52,080

some practices for example of a know

345

00:15:55,490 --> 00:15:53,520

much or whether it's the same in

346

00:15:57,890 --> 00:15:55,500

Australia as it is in America but I

347

00:15:59,870 --> 00:15:57,900

suspect it's close but you're dealing

348

00:16:03,560 --> 00:15:59,880

with close to half a population of

349

00:16:06,290 --> 00:16:03,570

medicos who either don't believe in

350

00:16:08,090 --> 00:16:06,300

evolution or believe in creation I think

351

00:16:09,920 --> 00:16:08,100

a report came out the other day they

352

00:16:11,630 --> 00:16:09,930

showed that two-thirds of medical

353

00:16:15,080 --> 00:16:11,640

students didn't know when to wash their

354

00:16:18,650 --> 00:16:15,090

hands so you actually have big problems

355

00:16:20,930 --> 00:16:18,660

within orthodoxy of people because I

356

00:16:24,050 --> 00:16:20,940

think we don't train them very well in

357

00:16:26,150 --> 00:16:24,060

some cases sometimes they themselves are

358

00:16:28,970 --> 00:16:26,160

not clear about the scientific basis of

359

00:16:30,230 --> 00:16:28,980

their practice and they can't be if

360

00:16:34,090 --> 00:16:30,240

you've got mitigators who are

361

00:16:36,140 --> 00:16:34,100

nonetheless recommending anti-scientific

362

00:16:38,000 --> 00:16:36,150

procedures ma'am you've got a bit of a

363

00:16:39,830 --> 00:16:38,010

conflict there and something that

364

00:16:41,330 --> 00:16:39,840

doesn't help it doesn't certainly

365

00:16:43,370 --> 00:16:41,340

doesn't help the patient sort out what

366

00:16:45,650 --> 00:16:43,380

they're supposed to be doing and because

367

00:16:47,570 --> 00:16:45,660

they're people few people do science and

368

00:16:49,340 --> 00:16:47,580

because we in science haven't I think

369

00:16:51,740 --> 00:16:49,350

promoted their discipline and how it

370

00:16:54,460 --> 00:16:51,750

works very well most people have

371

00:16:59,920 --> 00:16:54,470

absolutely no idea what you mean by

372

00:17:02,540 --> 00:16:59,930

evidence-based by peer review by

373

00:17:05,150 --> 00:17:02,550

testable hypothesis I mean these are

374

00:17:07,910 --> 00:17:05,160

just i attain phrases to people but they

375

00:17:10,880 --> 00:17:07,920

lie at the heart of what is and what

376

00:17:13,670 --> 00:17:10,890

isn't scientific well a lot of people in

377

00:17:16,069 --> 00:17:13,680

my experience who are ignorant as to

378

00:17:18,290 --> 00:17:16,079

what science is simply regarded as

379

00:17:21,530 --> 00:17:18,300

another belief system I've had that

380

00:17:24,079 --> 00:17:21,540

phone at me Minute Rice and you know

381

00:17:26,360 --> 00:17:24,089

what this off postmodern age one is as

382

00:17:28,400 --> 00:17:26,370

good as another yeah well you know you

383

00:17:32,000 --> 00:17:28,410

are entitled to believe one or the other

384

00:17:34,480 --> 00:17:32,010

but one if it adheres to the principles

385

00:17:36,890 --> 00:17:34,490

of the testable principles of science a

386

00:17:39,590 --> 00:17:36,900

legitimately called science and that

387

00:17:41,900 --> 00:17:39,600

which cannot adhere to those cannot i

388

00:17:44,120 --> 00:17:41,910

mean my students rise to training

389

00:17:45,950 --> 00:17:44,130

teaches had a great deal trouble with

390

00:17:49,070 --> 00:17:45,960

this have you said should you teach

391

00:17:51,530 --> 00:17:49,080

creationism in the science class and

392

00:17:53,210 --> 00:17:51,540

half of them did what journalists did

393

00:17:55,040 --> 00:17:53,220

said oh you've got to keep an open line

394

00:17:58,430 --> 00:17:55,050

and provide both sides of the story

395

00:18:01,550 --> 00:17:58,440

right now both sides of a story are not

396

00:18:02,540 --> 00:18:01,560

equal if you have for example the same

397

00:18:05,720 --> 00:18:02,550

thing is true of the

398

00:18:07,880 --> 00:18:05,730

this hideous anti-vaccination network if

399

00:18:10,130 --> 00:18:07,890

you say to a journalist you got to

400

00:18:12,590 --> 00:18:10,140

provide both sides of the story they'll

401
00:18:14,270 --> 00:18:12,600
get a professor of vaccination on one

402
00:18:16,010 --> 00:18:14,280
side and then they say well who's the

403
00:18:18,010 --> 00:18:16,020
other side they go and pick any loony

404
00:18:21,650 --> 00:18:18,020
they like you oppose us vaccinations and

405
00:18:24,140 --> 00:18:21,660
acquaintance and give them equal time I

406
00:18:25,820 --> 00:18:24,150
mean if you say that the world is round

407
00:18:27,730 --> 00:18:25,830
does that mean you've got to go and find

408
00:18:31,970 --> 00:18:27,740
a flat earth and give them equal time

409
00:18:34,070 --> 00:18:31,980
it's a silly attempt to balance a huge

410
00:18:36,860 --> 00:18:34,080
weight of accumulated and verified

411
00:18:38,600 --> 00:18:36,870
evidence against somebody who just has a

412
00:18:40,610 --> 00:18:38,610
crackpot theory moon does make for

413
00:18:42,500 --> 00:18:40,620

entertaining television it makes for

414

00:18:44,150 --> 00:18:42,510

entertaining television and also the

415

00:18:46,430 --> 00:18:44,160

code of ethics for journalists says

416

00:18:50,090 --> 00:18:46,440

you've got to provide another point of

417

00:18:52,220 --> 00:18:50,100

view and so doing the best they can when

418

00:18:54,470 --> 00:18:52,230

they don't know what is a legitimate

419

00:18:58,850 --> 00:18:54,480

point of view they'll go and find an

420

00:19:00,440 --> 00:18:58,860

opponent and the opponents who are many

421

00:19:03,470 --> 00:19:00,450

of them of course in the alternative

422

00:19:05,830 --> 00:19:03,480

brigade are very skilled at manipulating

423

00:19:08,930 --> 00:19:05,840

leader media and lobbying and

424

00:19:11,540 --> 00:19:08,940

advertising and you find advertisements

425

00:19:13,070 --> 00:19:11,550

for these natural therapies because they

426

00:19:15,590 --> 00:19:13,080

have no ethical restrictions on

427

00:19:18,950 --> 00:19:15,600

advertising their services whereas

428

00:19:21,290 --> 00:19:18,960

doctors and lawyers how many yeah so

429

00:19:23,270 --> 00:19:21,300

it's a very uneven battle for the public

430

00:19:25,790 --> 00:19:23,280

mind and one which is being skillfully

431

00:19:29,590 --> 00:19:25,800

one but people have more to gain by

432

00:19:32,930 --> 00:19:29,600

winning the lobbying battle then by

433

00:19:35,510 --> 00:19:32,940

acquiring scientifically based skills

434

00:19:38,990 --> 00:19:35,520

the other thing is of course and it it

435

00:19:42,260 --> 00:19:39,000

puzzles me is why people seem more prone

436

00:19:47,450 --> 00:19:42,270

to believe the unorthodox and the

437

00:19:49,120 --> 00:19:47,460

alternative then the verifiable and they

438

00:19:51,650 --> 00:19:49,130

just seem to be with a number of people

439

00:19:54,410 --> 00:19:51,660

quite a distinct preference for that

440

00:19:56,420 --> 00:19:54,420

just as you know a lot of people I mean

441

00:19:59,510 --> 00:19:56,430

there's no paper that runs now without a

442

00:20:01,400 --> 00:19:59,520

horoscope in it yeah it's absolute

443

00:20:04,970 --> 00:20:01,410

nonsense but people love believing it so

444

00:20:10,630 --> 00:20:04,980

you wonder why as a species we have this

445

00:20:14,000 --> 00:20:10,640

kind of preference for nonsense again

446

00:20:15,480 --> 00:20:14,010

listeners can find your very interesting

447

00:20:18,150 --> 00:20:15,490

article it's at the punch

448

00:20:19,590 --> 00:20:18,160

punch Comte you and I think when they go

449

00:20:21,930 --> 00:20:19,600

there and they just search for your name

450

00:20:24,810 --> 00:20:21,940

rob morris and they'll find that article

451
00:20:28,410 --> 00:20:24,820
there is a string of comments going on

452
00:20:32,010 --> 00:20:28,420
forever are being posted up by people

453
00:20:34,230 --> 00:20:32,020
who less than complimentary about what

454
00:20:36,780 --> 00:20:34,240
you've said but you've certainly got a

455
00:20:39,750 --> 00:20:36,790
stack of supporters in there agreeing

456
00:20:44,580 --> 00:20:39,760
with or backing up your statements and

457
00:20:47,520 --> 00:20:44,590
then I must say humbly is to my surprise

458
00:20:50,520 --> 00:20:47,530
I thought I'd be flamed off the pages

459
00:20:53,580 --> 00:20:50,530
but most of the people responding agree

460
00:20:56,100 --> 00:20:53,590
and many of them are very cheesed off

461
00:20:58,830 --> 00:20:56,110
when they pay their rapidly increasing

462
00:21:00,870 --> 00:20:58,840
medical benefits bill that some of it is

463
00:21:02,549 --> 00:21:00,880

subsidizing this nonsense because the

464

00:21:04,320 --> 00:21:02,559

medical benefits group want to get as

465

00:21:06,810 --> 00:21:04,330

many people in as they can so they'll

466

00:21:09,120 --> 00:21:06,820

adopt all these alternative bits of

467

00:21:10,890 --> 00:21:09,130

nonsense and charge us and the

468

00:21:13,560 --> 00:21:10,900

government for the privilege of doing so

469

00:21:16,350 --> 00:21:13,570

yeah it's a commercial decision to be

470

00:21:18,270 --> 00:21:16,360

sure yeah a lot of respondents and take

471

00:21:21,150 --> 00:21:18,280

them like that and good on them good on

472

00:21:23,130 --> 00:21:21,160

ax men this is another incidentally it's

473

00:21:25,620 --> 00:21:23,140

another push that we and Australian

474

00:21:27,570 --> 00:21:25,630

skeptics are pursuing is to try and get

475

00:21:29,820 --> 00:21:27,580

health funds to realize the folly of

476
00:21:32,520 --> 00:21:29,830
this but that's that's another battle

477
00:21:34,200 --> 00:21:32,530
but since it's somewhat connected I

478
00:21:35,580 --> 00:21:34,210
suppose but it's another disconnected

479
00:21:37,290 --> 00:21:35,590
and that's one that we are starting to

480
00:21:38,580 --> 00:21:37,300
look at her or we've got an awful lot of

481
00:21:41,310 --> 00:21:38,590
people who want to be behind this

482
00:21:43,140 --> 00:21:41,320
campaign and we're still early I think

483
00:21:44,790 --> 00:21:43,150
building a voice and I hope that voice

484
00:21:47,100 --> 00:21:44,800
will be influential enough to tackle

485
00:21:49,020 --> 00:21:47,110
some of these problems because too many

486
00:21:51,480 --> 00:21:49,030
people have tactical tackled it as

487
00:21:52,980 --> 00:21:51,490
individuals good on them but you don't

488
00:21:55,169 --> 00:21:52,990

get a government to listen easily when

489

00:21:57,000 --> 00:21:55,179

you're an individual so I hope you can

490

00:21:58,410 --> 00:21:57,010

get some universities and prestigious

491

00:22:00,210 --> 00:21:58,420

bodies and people you know what they're

492

00:22:02,070 --> 00:22:00,220

talking about saying enough is enough I

493

00:22:03,750 --> 00:22:02,080

mean look we've already got 14

494

00:22:06,600 --> 00:22:03,760

universities offering these courses

495

00:22:08,160 --> 00:22:06,610

what's happening to our universe of

496

00:22:09,530 --> 00:22:08,170

these standards I mean they do it

497

00:22:12,360 --> 00:22:09,540

because there's a quid in it but it's

498

00:22:14,700 --> 00:22:12,370

it's not a healthy development yes

499

00:22:17,310 --> 00:22:14,710

there's a university just recently

500

00:22:19,560 --> 00:22:17,320

offering a course in energy medicine the

501
00:22:22,140 --> 00:22:19,570
study of energy medicine yeah well the

502
00:22:23,760 --> 00:22:22,150
one that triggered this is the CQ you in

503
00:22:26,190 --> 00:22:23,770
Queensland is about to offer

504
00:22:28,080 --> 00:22:26,200
chiropractic course next year and that's

505
00:22:31,380 --> 00:22:28,090
really I think triggered the reaction

506
00:22:32,730 --> 00:22:31,390
that got this this round started and of

507
00:22:35,640 --> 00:22:32,740
course Rob there are other people

508
00:22:37,380 --> 00:22:35,650
involved in this campaign too yes so you

509
00:22:39,330 --> 00:22:37,390
can find some of their contributions on

510
00:22:41,490 --> 00:22:39,340
the other websites that are a bit like

511
00:22:45,180 --> 00:22:41,500
the punch this mine on the punch there's

512
00:22:48,030 --> 00:22:45,190
Loretta on crikey I think Alastair

513
00:22:50,669 --> 00:22:48,040

McClellan very well-versed in this

514

00:22:53,190 --> 00:22:50,679

problem he's got one on the conversation

515

00:22:56,400 --> 00:22:53,200

and a great deal of reaction to all of

516

00:22:58,290 --> 00:22:56,410

them so it would be a good debate for

517

00:23:00,630 --> 00:22:58,300

people who are interested in this to get

518

00:23:03,990 --> 00:23:00,640

involved in particularly those who are

519

00:23:08,280 --> 00:23:04,000

getting anxious about the kind of loss

520

00:23:09,930 --> 00:23:08,290

of focus of evidence-based practices in

521

00:23:12,960 --> 00:23:09,940

Australia and how they're being

522

00:23:14,970 --> 00:23:12,970

submitted all right Rob well I'll

523

00:23:16,710 --> 00:23:14,980

certainly include all those links on the

524

00:23:18,630 --> 00:23:16,720

show notes and in our newsletter which

525

00:23:20,040 --> 00:23:18,640

go out with the skeptic zone thank you

526

00:23:21,900 --> 00:23:20,050

once again and I can't help thinking

527

00:23:23,669 --> 00:23:21,910

that if the curiosity show was still on

528

00:23:26,370 --> 00:23:23,679

air that more primary school kids would

529

00:23:28,380 --> 00:23:26,380

be better versed in science thank you

530

00:23:41,510 --> 00:23:28,390

very kind of you Rob Morrison thank you

531

00:23:47,700 --> 00:23:44,789

you're listening to sep toid i'm brian

532

00:23:53,010 --> 00:23:47,710

donut from sep toy calm the tap-dancing

533

00:23:55,019 --> 00:23:53,020

Madonna of Aguas Calientes in 1953 while

534

00:23:58,110 --> 00:23:55,029

on a unicycle preaching tour of the

535

00:24:00,180 --> 00:23:58,120

Guatemalan Highlands two nuns reported a

536

00:24:04,350 --> 00:24:00,190

mysterious phenomenon at a roadside

537

00:24:07,080 --> 00:24:04,360

shrine before their astonished eyes a

538

00:24:09,870 --> 00:24:07,090

statue of the Virgin Mary appeared to

539

00:24:13,110 --> 00:24:09,880

come to life climb down from its plinth

540

00:24:15,659 --> 00:24:13,120

and deliver messages from Jesus while

541

00:24:18,450 --> 00:24:15,669

simultaneously performing tap routines

542

00:24:21,210 --> 00:24:18,460

from classic Hollywood musicals the

543

00:24:24,450 --> 00:24:21,220

stunned nuns sisters gracias por nada

544

00:24:26,820 --> 00:24:24,460

and dolores de cabeza recounted their

545

00:24:29,010 --> 00:24:26,830

experience to the local bishop who

546

00:24:31,159 --> 00:24:29,020

listened intently then had the two

547

00:24:34,019 --> 00:24:31,169

committed to a home for the bewildered

548

00:24:37,350 --> 00:24:34,029

but word of the visions soon spread

549

00:24:39,690 --> 00:24:37,360

before long thousands were flocking to

550

00:24:42,830 --> 00:24:39,700

the shrine just outside the village of

551

00:24:45,659 --> 00:24:42,840

no lo creo over the following weeks

552

00:24:47,789 --> 00:24:45,669

believers claimed the Virgin expanded

553

00:24:51,419 --> 00:24:47,799

her repertoire to include everything

554

00:24:53,130 --> 00:24:51,429

from flamenco to classical ballet dozens

555

00:24:55,110 --> 00:24:53,140

of miracles were attributed to the

556

00:24:57,690 --> 00:24:55,120

Virgin people who had previously

557

00:25:00,630 --> 00:24:57,700

exhibited no dancing ability whatsoever

558

00:25:04,500 --> 00:25:00,640

were suddenly expert in intricate

559

00:25:07,610 --> 00:25:04,510

rhombus exuberant salsas and much to the

560

00:25:10,789 --> 00:25:07,620

dismay of the local clergy steamy tangos

561

00:25:14,519 --> 00:25:10,799

but what did the observers really see

562

00:25:16,380 --> 00:25:14,529

did a stone statue of Mary really come

563

00:25:19,889 --> 00:25:16,390

to life and dance before an enraptured

564

00:25:27,360 --> 00:25:19,899

audience well of course not it's a load

565

00:25:29,130 --> 00:25:27,370

of horse hi this is Tim Farley you

566

00:25:31,919 --> 00:25:29,140

probably know me from what's the harm

567

00:25:34,529 --> 00:25:31,929

net a catalogue of the real world harm

568

00:25:37,320 --> 00:25:34,539

caused by lack of critical thinking but

569

00:25:40,230 --> 00:25:37,330

that's not my only project i present at

570

00:25:42,419 --> 00:25:40,240

skeptic events I post a daily skeptic

571

00:25:45,120 --> 00:25:42,429

history fact on Twitter and Facebook and

572

00:25:45,779 --> 00:25:45,130

I blog about using new techniques on the

573

00:25:49,229 --> 00:25:45,789

internet too

574

00:25:52,680 --> 00:25:49,239

vance skepticism come over to skip tools

575

00:26:09,529 --> 00:25:52,690

com and check out my latest ideas but

576
00:26:14,310 --> 00:26:12,359
and I'm pleased that once again once

577
00:26:16,769 --> 00:26:14,320
again as we do over the years we've

578
00:26:18,899 --> 00:26:16,779
caught up with dr. Paul Willis now

579
00:26:21,570 --> 00:26:18,909
happily ensconced in the beautiful city

580
00:26:23,729 --> 00:26:21,580
of Adelaide hello Paul how are you

581
00:26:25,859 --> 00:26:23,739
Richard I'm doing really well but more

582
00:26:29,219 --> 00:26:25,869
importantly how you now that you're no

583
00:26:32,479 --> 00:26:29,229
longer the the great frontman for the

584
00:26:35,789 --> 00:26:32,489
ABC science television show catalyst

585
00:26:39,299 --> 00:26:35,799
makes me sound incredible and look

586
00:26:41,190 --> 00:26:39,309
absolutely loving Adelaide and the

587
00:26:44,399 --> 00:26:41,200
position of God here is director of the

588
00:26:46,859 --> 00:26:44,409

Royal Institution is fantastic it's an

589

00:26:48,989 --> 00:26:46,869

opportunity to unparalleled

590

00:26:51,029 --> 00:26:48,999

opportunities to talk science to the

591

00:26:54,659 --> 00:26:51,039

world but particularly to Australians

592

00:26:57,229 --> 00:26:54,669

and and just try and weave signs into

593

00:26:59,969 --> 00:26:57,239

the fabric of our society you know and

594

00:27:02,159 --> 00:26:59,979

rational thoughts in there and skeptical

595

00:27:03,629 --> 00:27:02,169

thoughts in there all those things that

596

00:27:05,940 --> 00:27:03,639

mean so much to me I'll get to play with

597

00:27:08,330 --> 00:27:05,950

them all it's a good job it sounds like

598

00:27:10,589 --> 00:27:08,340

the ideal job for you but I do know that

599

00:27:13,379 --> 00:27:10,599

you had a very long and successful

600

00:27:16,259 --> 00:27:13,389

career on ABC television and I know you

601
00:27:19,710 --> 00:27:16,269
enjoyed that too oh yeah look I was at

602
00:27:21,509 --> 00:27:19,720
the ABC for 14 years most of that was on

603
00:27:25,139 --> 00:27:21,519
television first of all in quantum and

604
00:27:27,659 --> 00:27:25,149
then 10 years on catalyst and Delia it

605
00:27:29,489 --> 00:27:27,669
was a hell of a trip you know we did

606
00:27:32,549 --> 00:27:29,499
lots of interesting stories went to lots

607
00:27:35,009 --> 00:27:32,559
of interesting places but to be honest

608
00:27:38,519 --> 00:27:35,019
you know after 10 years it was time for

609
00:27:41,999 --> 00:27:38,529
something different time to explore new

610
00:27:44,789 --> 00:27:42,009
horizons and this opportunity is exactly

611
00:27:47,159 --> 00:27:44,799
that you know the chance to to do

612
00:27:49,009 --> 00:27:47,169
something similar but different time to

613
00:27:51,539 --> 00:27:49,019

do something a bit creative you notes

614

00:27:53,820 --> 00:27:51,549

it's just a logical progression in my

615

00:27:56,099 --> 00:27:53,830

career it sounds like a very good move

616

00:27:57,830 --> 00:27:56,109

indeed and we'll get back on to more

617

00:28:00,260 --> 00:27:57,840

about what you're doing

618

00:28:02,240 --> 00:28:00,270

down there and adelaide soon just to

619

00:28:04,940 --> 00:28:02,250

recap because when we do catch up with

620

00:28:07,460 --> 00:28:04,950

you for some reason I don't know why the

621

00:28:08,990 --> 00:28:07,470

subject of creationism comes up now I'm

622

00:28:12,019 --> 00:28:09,000

just going to play a little clip of you

623

00:28:15,230 --> 00:28:12,029

and I chatting ten years ago and this is

624

00:28:18,769 --> 00:28:15,240

from the days of net FM when I did a

625

00:28:20,870 --> 00:28:18,779

show with good old Stefan cyka another a

626

00:28:22,220 --> 00:28:20,880

good test if I can just burn this money

627

00:28:25,039 --> 00:28:22,230

does this one comes from paleontology

628

00:28:26,480 --> 00:28:25,049

for a long time the creationist has been

629

00:28:29,210 --> 00:28:26,490

saying well you know something that's

630

00:28:30,680 --> 00:28:29,220

complicated as a bird's wing like half a

631

00:28:32,750 --> 00:28:30,690

wings not going to work so you can't

632

00:28:34,700 --> 00:28:32,760

have half a bird's wing and so therefore

633

00:28:36,529 --> 00:28:34,710

you evolutionist show me half a bird's

634

00:28:39,889 --> 00:28:36,539

wing and I believe that they evolved

635

00:28:42,320 --> 00:28:39,899

from something else yep only in 1999

636

00:28:46,070 --> 00:28:42,330

core dipteryx was found in China it's a

637

00:28:48,260 --> 00:28:46,080

small dinosaur with hard swing it is the

638

00:28:50,180 --> 00:28:48,270

big it is it is like God's on our side

639

00:28:54,139 --> 00:28:50,190

he's actually giving us all the good it

640

00:28:56,990 --> 00:28:54,149

is hallelujah swagger to these guys is

641

00:29:00,110 --> 00:28:57,000

courageous for hell and unlike you know

642

00:29:01,519 --> 00:29:00,120

then they say will okay so no it's a

643

00:29:03,769 --> 00:29:01,529

bird that's lost its you know that's

644

00:29:05,690 --> 00:29:03,779

this longer swing at the time he sent me

645

00:29:07,460 --> 00:29:05,700

back if their mutant because like it's

646

00:29:08,930 --> 00:29:07,470

also got a reptiles tail it's got a

647

00:29:10,460 --> 00:29:08,940

reptile skull it's got all these

648

00:29:12,409 --> 00:29:10,470

dinosaur features if it didn't have the

649

00:29:14,570 --> 00:29:12,419

feathers on it and we wouldn't know that

650

00:29:16,220 --> 00:29:14,580

it was a dart at the delay again further

651
00:29:18,289 --> 00:29:16,230
finna day so all those people out there

652
00:29:20,299 --> 00:29:18,299
when the Christian signs bus comes your

653
00:29:22,250 --> 00:29:20,309
way the creation of science I creation

654
00:29:24,139 --> 00:29:22,260
creative innovation for creation let's

655
00:29:25,490 --> 00:29:24,149
not put the word sites in there let's

656
00:29:27,649 --> 00:29:25,500
just take that away from when the

657
00:29:29,720 --> 00:29:27,659
creationist bus comes your way get out

658
00:29:32,269 --> 00:29:29,730
your eggs and pelham yes it's a good

659
00:29:35,269 --> 00:29:32,279
attracts you swine in fact it's good

660
00:29:39,019 --> 00:29:35,279
into thing so Paul that was ten years

661
00:29:41,419 --> 00:29:39,029
ago when you were heavily involved in

662
00:29:43,090 --> 00:29:41,429
battling the creationists and throwing

663
00:29:46,580 --> 00:29:43,100

eggs at them or whatever the case may be

664

00:29:48,200 --> 00:29:46,590

what's changed in the last 10 years in

665

00:29:51,260 --> 00:29:48,210

the great fight that we have against

666

00:29:54,490 --> 00:29:51,270

these people you know I hate to say I

667

00:29:56,960 --> 00:29:54,500

was right but it actually got worse

668

00:29:59,029 --> 00:29:56,970

because particularly in the United

669

00:30:03,560 --> 00:29:59,039

States there garnering all kinds of

670

00:30:05,419 --> 00:30:03,570

political support there within the last

671

00:30:10,019 --> 00:30:05,429

10 years we've seen the rise of

672

00:30:12,479 --> 00:30:10,029

intelligent design which is it just

673

00:30:16,830 --> 00:30:12,489

creationism in a cheap tuxedo that's

674

00:30:18,810 --> 00:30:16,840

what they say yeah yeah and and they're

675

00:30:20,879 --> 00:30:18,820

quite well resourced and you know if

676

00:30:23,700 --> 00:30:20,889

it's like that game what do you call

677

00:30:25,769 --> 00:30:23,710

them whack-a-mole with you try and like

678

00:30:29,009 --> 00:30:25,779

them and every time you hit 12 others

679

00:30:31,469 --> 00:30:29,019

pop up and I've always said that we will

680

00:30:34,649 --> 00:30:31,479

never win against the creationist but if

681

00:30:38,639 --> 00:30:34,659

we stop fighting we will lose yeah and

682

00:30:42,119 --> 00:30:38,649

it's a loss we cannot afford we it's

683

00:30:44,909 --> 00:30:42,129

hard enough to educate kids as to what

684

00:30:46,739 --> 00:30:44,919

is and what isn't science and what is

685

00:30:51,049 --> 00:30:46,749

and what isn't rational thinking and

686

00:30:55,379 --> 00:30:51,059

when you stir into the science classroom

687

00:30:58,139 --> 00:30:55,389

or any classroom the whole gobbledygook

688

00:31:01,499 --> 00:30:58,149

mixed up bag of illogical and fallacious

689

00:31:03,959 --> 00:31:01,509

wrong arguments that is creationism it's

690

00:31:06,899 --> 00:31:03,969

just it's creating a handicap for the

691

00:31:09,690 --> 00:31:06,909

whole of society it's that's very true

692

00:31:12,060 --> 00:31:09,700

and it's it's all the more galling when

693

00:31:14,159 --> 00:31:12,070

you think and consider over the last 10

694

00:31:16,979 --> 00:31:14,169

years since we originally spoke on the

695

00:31:19,979 --> 00:31:16,989

subject the advances and the discoveries

696

00:31:22,950 --> 00:31:19,989

that must have been made yeah sure I

697

00:31:26,999 --> 00:31:22,960

mean clip you just played about corded

698

00:31:28,589 --> 00:31:27,009

tricks since that went to air ten years

699

00:31:31,019 --> 00:31:28,599

ago cut still can't believe it's ding

700

00:31:35,399 --> 00:31:31,029

either you and I actually look younger

701

00:31:38,849 --> 00:31:35,409

Richard we do but you know since that

702

00:31:40,829 --> 00:31:38,859

time a whole load more fossils have come

703

00:31:46,769 --> 00:31:40,839

out of that deposit early earning in

704

00:31:50,879 --> 00:31:46,779

China and every conceivable stage from a

705

00:31:53,339 --> 00:31:50,889

small Feder furry dinosaur through to a

706

00:31:55,349 --> 00:31:53,349

fully fledged bird every conceivable

707

00:31:58,229 --> 00:31:55,359

step of the way as proceed preserved

708

00:32:00,239 --> 00:31:58,239

they're not just in the skeletons but

709

00:32:04,229 --> 00:32:00,249

also in the development of feathers

710

00:32:06,989 --> 00:32:04,239

themselves yeah you couldn't ask for

711

00:32:10,440 --> 00:32:06,999

more intermediate forms to demonstrate

712

00:32:14,909 --> 00:32:10,450

how one form got to another form and yet

713

00:32:17,099 --> 00:32:14,919

you may as well be Titus trying to

714

00:32:19,589 --> 00:32:17,109

convince a creationist of the skies red

715

00:32:22,680 --> 00:32:19,599

or as you once said it's like trying to

716

00:32:23,320 --> 00:32:22,690

nail jelly to a wall it is there is the

717

00:32:25,330 --> 00:32:23,330

area

718

00:32:27,970 --> 00:32:25,340

they are immune to reason they are

719

00:32:32,350 --> 00:32:27,980

immune to rational argument it actually

720

00:32:34,510 --> 00:32:32,360

takes a Herculean effort to overturn

721

00:32:37,180 --> 00:32:34,520

that mindset because you're not just

722

00:32:39,130 --> 00:32:37,190

trying to establish a few facts you're

723

00:32:41,530 --> 00:32:39,140

actually trying to completely rework

724

00:32:43,750 --> 00:32:41,540

their whole worldview that's no small

725

00:32:46,690 --> 00:32:43,760

job I haven't found the formula for

726

00:32:48,130 --> 00:32:46,700

doing that yet now let's get back to

727

00:32:49,840 --> 00:32:48,140

what you're doing at the moment so you

728

00:32:52,330 --> 00:32:49,850

made the big move from the big smoke

729

00:32:54,970 --> 00:32:52,340

here in Sydney to the tilly not so big

730

00:32:57,550 --> 00:32:54,980

smoke in Adelaide yeah but I guess one

731

00:33:02,230 --> 00:32:57,560

of the advantages of that is though no

732

00:33:04,300 --> 00:33:02,240

more Sydney traffic jams yeah well my

733

00:33:07,000 --> 00:33:04,310

wife kind of put it very well when we

734

00:33:09,520 --> 00:33:07,010

came back to Sydney to a weekend visit

735

00:33:11,890 --> 00:33:09,530

about six weeks after we arrived in that

736

00:33:13,720 --> 00:33:11,900

Elaine and on the saturday i said to her

737

00:33:16,390 --> 00:33:13,730

so what's it like coming back to Sydney

738

00:33:19,630 --> 00:33:16,400

and she said well it's a bit like going

739

00:33:21,370 --> 00:33:19,640

out to lunch with an old boyfriend in on

740

00:33:23,350 --> 00:33:21,380

the drive there you're thinking things

741

00:33:25,450 --> 00:33:23,360

won't be so bad you know we had a great

742

00:33:27,340 --> 00:33:25,460

time together you never know might get

743

00:33:29,260 --> 00:33:27,350

lucky things might spark up again and

744

00:33:32,050 --> 00:33:29,270

then halfway through lunch you know why

745

00:33:33,610 --> 00:33:32,060

you dropped in we we didn't even get out

746

00:33:36,190 --> 00:33:33,620

of the airport in Sydney and would have

747

00:33:37,780 --> 00:33:36,200

stuck in the traffic jam yeah still yet

748

00:33:40,420 --> 00:33:37,790

to experience one here in adelaide but

749

00:33:41,950 --> 00:33:40,430

look I can bang on about a delayed until

750

00:33:44,200 --> 00:33:41,960

the cows come home but the only thing

751
00:33:46,120 --> 00:33:44,210
you need to know Richard is it within an

752
00:33:48,580 --> 00:33:46,130
hour of me here and in the middle of a

753
00:33:51,640 --> 00:33:48,590
delay a 300 of the best seller doors on

754
00:33:53,620 --> 00:33:51,650
the fact after reason do you need to

755
00:33:56,050 --> 00:33:53,630
live here now tell me more about what

756
00:33:58,480 --> 00:33:56,060
you're doing professionally there what

757
00:34:00,610 --> 00:33:58,490
the Royal Institution this is the first

758
00:34:02,590 --> 00:34:00,620
time that a sister organization of the

759
00:34:05,050 --> 00:34:02,600
Royal Institution in Great Britain has

760
00:34:07,330 --> 00:34:05,060
been set up now they've been going for

761
00:34:09,220 --> 00:34:07,340
two hundred and twelve years they're

762
00:34:12,880 --> 00:34:09,230
responsible for ten elements on the

763
00:34:16,720 --> 00:34:12,890

periodic table including sodium and 14

764

00:34:18,670 --> 00:34:16,730

Nobel prizes we've been going since 2007

765

00:34:21,430 --> 00:34:18,680

and so we haven't got any elements or a

766

00:34:23,340 --> 00:34:21,440

Nobel prizes I'm not yet but you know it

767

00:34:26,050 --> 00:34:23,350

gives us something to aim for yeah and

768

00:34:28,420 --> 00:34:26,060

principally these the way to think about

769

00:34:29,650 --> 00:34:28,430

it is not a lot of people particularly

770

00:34:32,590 --> 00:34:29,660

Australia have heard of the Royal

771

00:34:35,440 --> 00:34:32,600

Institution in great room but it's kind

772

00:34:38,139 --> 00:34:35,450

of in a way a companion organization to

773

00:34:41,169 --> 00:34:38,149

royal society more society is about

774

00:34:44,379 --> 00:34:41,179

doing science the royal institution is

775

00:34:46,960 --> 00:34:44,389

about communicating science and the way

776

00:34:48,639 --> 00:34:46,970

that most people would anybody who's

777

00:34:50,079 --> 00:34:48,649

spent any time in England would know of

778

00:34:52,450 --> 00:34:50,089

the Royal Institution to the christmas

779

00:34:55,690 --> 00:34:52,460

lectures that are held every year on BBC

780

00:34:58,329 --> 00:34:55,700

and these are these actually go back to

781

00:34:59,560 --> 00:34:58,339

Faraday he used to give the original

782

00:35:03,480 --> 00:34:59,570

Christmas lectures at the Royal

783

00:35:06,130 --> 00:35:03,490

Institution in London and every year a

784

00:35:08,530 --> 00:35:06,140

celebrated scientists will give I think

785

00:35:11,140 --> 00:35:08,540

there's six in a serious lectures over

786

00:35:16,390 --> 00:35:11,150

the Christmas break on a particular area

787

00:35:20,829 --> 00:35:16,400

of science well anyway and to cut a long

788

00:35:23,170 --> 00:35:20,839

story short the South Australia was the

789

00:35:26,230 --> 00:35:23,180

first place to get the first sister

790

00:35:30,069 --> 00:35:26,240

organization of the RI and so far the

791

00:35:32,200 --> 00:35:30,079

only as i said we started in 2007 we've

792

00:35:34,480 --> 00:35:32,210

been in this magnificent building that

793

00:35:35,770 --> 00:35:34,490

you can see behind me here because i

794

00:35:37,569 --> 00:35:35,780

should tell our listeners that we're

795

00:35:39,880 --> 00:35:37,579

actually video each other at the moment

796

00:35:41,589 --> 00:35:39,890

so i can see various people wandering

797

00:35:45,309 --> 00:35:41,599

past you in the corridor carrying a

798

00:35:47,170 --> 00:35:45,319

strange antics yeah you're not seeing a

799

00:35:49,569 --> 00:35:47,180

building at its best but no we've been

800

00:35:53,650 --> 00:35:49,579

in here since 2009 and it's the original

801
00:35:55,410 --> 00:35:53,660
Stock Exchange building for a delay the

802
00:35:59,200 --> 00:35:55,420
building was built in nineteen oh one

803
00:36:02,920 --> 00:35:59,210
with a great expense we've been able to

804
00:36:04,630 --> 00:36:02,930
redevelop half the building with all the

805
00:36:07,750 --> 00:36:04,640
latest technology and essentially we've

806
00:36:10,720 --> 00:36:07,760
got a fully automated television studio

807
00:36:12,640 --> 00:36:10,730
which can broadcast live to the Internet

808
00:36:16,359 --> 00:36:12,650
in high definition on a five cameras

809
00:36:20,620 --> 00:36:16,369
which feed wow so that's become the

810
00:36:25,089 --> 00:36:20,630
center of our our outreach you know we

811
00:36:28,780 --> 00:36:25,099
can have a well if I'm give you an

812
00:36:31,059 --> 00:36:28,790
example on Tower day so the 28 of the

813
00:36:32,800 --> 00:36:31,069

synth which is tower which is the

814

00:36:35,020 --> 00:36:32,810

circumference of a circle divided by the

815

00:36:38,200 --> 00:36:35,030

radius instead of the diameter you know

816

00:36:41,410 --> 00:36:38,210

the things that math nerd 09 well it's

817

00:36:43,920 --> 00:36:41,420

how they we had some musicians from the

818

00:36:47,530 --> 00:36:43,930

elder Conservatorium come over and

819

00:36:48,380 --> 00:36:47,540

perform some musical pieces inspired by

820

00:36:51,230 --> 00:36:48,390

mathematics

821

00:36:53,809 --> 00:36:51,240

including the first 130 places of Tao

822

00:36:56,420 --> 00:36:53,819

puts music right it was a Tuesday

823

00:37:00,890 --> 00:36:56,430

lunchtime and we had a live audience

824

00:37:04,549 --> 00:37:00,900

downstairs of six but because we could

825

00:37:05,839 --> 00:37:04,559

record it live to the internet or put it

826

00:37:08,750 --> 00:37:05,849

out live to the Internet and then

827

00:37:11,299 --> 00:37:08,760

putting up a recording of that we

828

00:37:14,210 --> 00:37:11,309

actually scored more than 10,000 hits

829

00:37:16,430 --> 00:37:14,220

worldwide within 24 hours that's worth

830

00:37:18,920 --> 00:37:16,440

so yeah you know the thought that there

831

00:37:21,259 --> 00:37:18,930

is someone in Colombia tuning in to

832

00:37:25,400 --> 00:37:21,269

avant-garde music coming out of my

833

00:37:27,589 --> 00:37:25,410

auditorium in in less than a day I you

834

00:37:30,170 --> 00:37:27,599

know that's the power of what we can do

835

00:37:34,549 --> 00:37:30,180

here so we're developing all sorts of

836

00:37:38,089 --> 00:37:34,559

stuff and if I can just put in a big

837

00:37:41,390 --> 00:37:38,099

plug here to your listeners look tuning

838

00:37:43,220 --> 00:37:41,400

to the our isles website because we we

839

00:37:46,130 --> 00:37:43,230

have an event every week at least

840

00:37:49,039 --> 00:37:46,140

sometimes two events a week that go live

841

00:37:51,950 --> 00:37:49,049

to the internet and so you've got Q&A

842

00:37:53,749 --> 00:37:51,960

style forums where you can actually feed

843

00:37:55,579 --> 00:37:53,759

back into it in real time no matter

844

00:37:58,670 --> 00:37:55,589

where you are you can feed your

845

00:38:00,440 --> 00:37:58,680

questions to our panel like we just this

846

00:38:02,990 --> 00:38:00,450

week we had a really good discussion on

847

00:38:05,329 --> 00:38:03,000

world population how many people can the

848

00:38:07,400 --> 00:38:05,339

world taken what is what are the trends

849

00:38:09,890 --> 00:38:07,410

in world population why is the world

850

00:38:12,710 --> 00:38:09,900

population all this sort of stuff we're

851
00:38:15,289 --> 00:38:12,720
able to air and a town hall-style across

852
00:38:18,740 --> 00:38:15,299
the country so do tuning have a look at

853
00:38:20,559 --> 00:38:18,750
what we're up to and good it I'm going

854
00:38:25,460 --> 00:38:20,569
to give the URL don't edit this bit

855
00:38:29,329 --> 00:38:25,470
don't worry our aisles that's our I aus

856
00:38:30,980 --> 00:38:29,339
org a year bookmark the site and come

857
00:38:32,359 --> 00:38:30,990
back folks because we're going to be

858
00:38:35,269 --> 00:38:32,369
doing lots of interesting stuff in the

859
00:38:37,430 --> 00:38:35,279
future well that certainly will be a

860
00:38:39,529 --> 00:38:37,440
sight worth bookmarking and I'll put

861
00:38:41,329 --> 00:38:39,539
that out on the newsletter and in the

862
00:38:42,980 --> 00:38:41,339
show notes just in case you didn't get

863
00:38:44,329 --> 00:38:42,990

that but of course since we're going to

864

00:38:46,549 --> 00:38:44,339

repeat it before the end of the

865

00:38:48,079 --> 00:38:46,559

interview I'm sure you will it sounds

866

00:38:49,880 --> 00:38:48,089

like you've been having a successful

867

00:38:51,980 --> 00:38:49,890

time you vote you haven't been there too

868

00:38:54,099 --> 00:38:51,990

long but I can see that you're already

869

00:38:59,089 --> 00:38:54,109

settling in how else can the public

870

00:39:01,090 --> 00:38:59,099

become involved well if you're not in a

871

00:39:04,690 --> 00:39:01,100

delight then you need to get

872

00:39:07,540 --> 00:39:04,700

to our Facebook sites and other online

873

00:39:09,460 --> 00:39:07,550

social activities in order to keep up

874

00:39:11,800 --> 00:39:09,470

with what we're doing and as I said

875

00:39:14,560 --> 00:39:11,810

there are ways over the Internet of

876

00:39:17,800 --> 00:39:14,570

interacting live with what we do and of

877

00:39:20,740 --> 00:39:17,810

course there's an open invitation to you

878

00:39:23,290 --> 00:39:20,750

and the skeptics I want you guys over

879

00:39:25,240 --> 00:39:23,300

here to do a show that we can put live

880

00:39:28,060 --> 00:39:25,250

out across Australia or maybe turn into

881

00:39:29,950 --> 00:39:28,070

a DVD that can be so circulated so are

882

00:39:32,710 --> 00:39:29,960

you interested you don't have to ask me

883

00:39:36,310 --> 00:39:32,720

twice all that sounds that sounds like

884

00:39:39,250 --> 00:39:36,320

an excellent project sometime in 2012

885

00:39:41,350 --> 00:39:39,260

when I'm not in some far-flung corner of

886

00:39:43,120 --> 00:39:41,360

the earth globe trotting over I've been

887

00:39:44,770 --> 00:39:43,130

following your tweets and i'm trying to

888

00:39:48,460 --> 00:39:44,780

figure out which continents you haven't

889

00:39:52,750 --> 00:39:48,470

been to Antarctica yeah been there done

890

00:39:54,670 --> 00:39:52,760

yeah idea how many times 70 you're

891

00:39:58,630 --> 00:39:54,680

kidding you've been to Antarctica seven

892

00:40:01,870 --> 00:39:58,640

times yes Cole really yeah you shocked

893

00:40:03,310 --> 00:40:01,880

me as I me yeah and then just the side

894

00:40:05,830 --> 00:40:03,320

note to that of course you would tell me

895

00:40:08,170 --> 00:40:05,840

one so I could have even been your first

896

00:40:10,270 --> 00:40:08,180

trip down there you walking along and

897

00:40:12,850 --> 00:40:10,280

you found was that a plesiosaur

898

00:40:15,940 --> 00:40:12,860

something in wonderful oh we found

899

00:40:17,650 --> 00:40:15,950

pleasing sores down there incredible

900

00:40:20,230 --> 00:40:17,660

fossils if you go to the right places

901
00:40:22,270 --> 00:40:20,240
there you know our untouched fossil

902
00:40:24,460 --> 00:40:22,280
fields just bristling with all sorts of

903
00:40:26,980 --> 00:40:24,470
interesting marine creatures and that

904
00:40:30,940 --> 00:40:26,990
also stumbled across a meteorite a

905
00:40:32,710 --> 00:40:30,950
couple of years back and unfortunately I

906
00:40:35,770 --> 00:40:32,720
couldn't collect it at that time and by

907
00:40:39,040 --> 00:40:35,780
the time I got back there couldn't

908
00:40:40,390 --> 00:40:39,050
relocate that specific specimen found

909
00:40:43,990 --> 00:40:40,400
some other stuff that I thought was

910
00:40:45,550 --> 00:40:44,000
meteorite collected about two kilos and

911
00:40:46,930 --> 00:40:45,560
blunt them all the way back to Australia

912
00:40:48,970 --> 00:40:46,940
and know they were actually just rocks

913
00:40:51,430 --> 00:40:48,980

but the other one was a meteorite yes of

914

00:40:53,350 --> 00:40:51,440

course it was attached to prove it but

915

00:40:56,170 --> 00:40:53,360

these wonderful fields of fossils down

916

00:40:58,870 --> 00:40:56,180

there um you can't just go down and

917

00:41:01,210 --> 00:40:58,880

plunder them can you no no and that's

918

00:41:03,430 --> 00:41:01,220

one reason why they're so fabulous you

919

00:41:05,290 --> 00:41:03,440

know there used to be fabulous fields of

920

00:41:06,520 --> 00:41:05,300

fossils all over the planet but people

921

00:41:08,770 --> 00:41:06,530

have gone out there and collected all

922

00:41:10,990 --> 00:41:08,780

the stuff off the surface whereas you go

923

00:41:12,720 --> 00:41:11,000

to a place like seymour island and while

924

00:41:16,140 --> 00:41:12,730

a couple

925

00:41:19,110 --> 00:41:16,150

of or very few paleontologists have been

926
00:41:22,740 --> 00:41:19,120
able to get there and do some sample

927
00:41:26,460 --> 00:41:22,750
collecting and most people simply can't

928
00:41:28,440 --> 00:41:26,470
get there but even if you can get there

929
00:41:30,210 --> 00:41:28,450
there are restrictions on you picking

930
00:41:32,340 --> 00:41:30,220
the stuff up and taking it away yeah

931
00:41:34,740 --> 00:41:32,350
added to that the fact that there's no

932
00:41:38,070 --> 00:41:34,750
grass there's no bushes there's no soil

933
00:41:41,160 --> 00:41:38,080
and so if there's no ice you are seeing

934
00:41:44,100 --> 00:41:41,170
just the fossils and the rocks so it's

935
00:41:48,540 --> 00:41:44,110
it's a stunning thing good to see you

936
00:41:51,720 --> 00:41:48,550
going back unfortunately I'm not on the

937
00:41:54,200 --> 00:41:51,730
schedule at the moment because I've got

938
00:41:56,460 --> 00:41:54,210

my hands full running this place and

939

00:41:58,350 --> 00:41:56,470

bringing it up to speed but I do hope to

940

00:42:02,550 --> 00:41:58,360

go back one day it's one of those places

941

00:42:04,650 --> 00:42:02,560

that once it's got its claws in you they

942

00:42:06,510 --> 00:42:04,660

don't come out you know you can put

943

00:42:08,670 --> 00:42:06,520

Antarctica in the boy but you can't take

944

00:42:10,710 --> 00:42:08,680

it back out again and I dearly love to

945

00:42:13,290 --> 00:42:10,720

get them love to take my little bloke

946

00:42:16,530 --> 00:42:13,300

down there and show him around yeah and

947

00:42:21,270 --> 00:42:16,540

me too while you're at it oh yeah sure

948

00:42:24,360 --> 00:42:21,280

oh yeah yeah always have time yeah Paul

949

00:42:28,890 --> 00:42:24,370

the website once again oh yeah that

950

00:42:30,870 --> 00:42:28,900

website is RI a USO org got a you folks

951
00:42:34,980 --> 00:42:30,880
run along to the website have a look

952
00:42:36,960 --> 00:42:34,990
enjoy the wonderful and free information

953
00:42:39,510 --> 00:42:36,970
and interactive information put out by

954
00:42:40,830 --> 00:42:39,520
the institution and dr. Paul Willis a

955
00:42:42,930 --> 00:42:40,840
pleasure to catch up with you again

956
00:42:45,720 --> 00:42:42,940
let's do it again in another 10 years

957
00:42:47,520 --> 00:42:45,730
well one you come over to my place and

958
00:42:49,260 --> 00:42:47,530
we'll start investigating some of those

959
00:42:59,009 --> 00:42:49,270
wineries that sounds like a good idea

960
00:43:04,210 --> 00:43:02,049
hi my name is Erica dining and I

961
00:43:07,000 --> 00:43:04,220
recently published a book my dad is

962
00:43:08,829 --> 00:43:07,010
Brian Dunning from skype.com the title

963
00:43:11,589 --> 00:43:08,839

of my book is polar bear in the trial of

964

00:43:13,420 --> 00:43:11,599

leadership you can find it on amazon com

965

00:43:15,910 --> 00:43:13,430

or through the link at skeptic zoned out

966

00:43:17,920 --> 00:43:15,920

TV it is an adventure novel about the

967

00:43:20,049 --> 00:43:17,930

trials of a group of animals trying to

968

00:43:21,970 --> 00:43:20,059

escape a corrupt Queen this book is

969

00:43:23,859 --> 00:43:21,980

great for families adolescents and

970

00:43:26,049 --> 00:43:23,869

children alike and here it is again

971

00:43:42,180 --> 00:43:26,059

polar bear in the trial of leadership by

972

00:43:48,130 --> 00:43:45,279

thank you for listening to the skeptic

973

00:43:52,690 --> 00:43:48,140

zone once again don't forget you can bid

974

00:43:54,819 --> 00:43:52,700

on Maynard classics and skip toid 3 the

975

00:43:56,769 --> 00:43:54,829

whole kit and caboodle the CD

976

00:43:58,809 --> 00:43:56,779

autographed by main art himself and

977

00:44:01,930 --> 00:43:58,819

sceptile III is autographed by Brian

978

00:44:04,180 --> 00:44:01,940

Dunning and yours truly that will help

979

00:44:07,569 --> 00:44:04,190

may not get to Tam 10 so you can do

980

00:44:10,690 --> 00:44:07,579

wonderful reports and interviews for you

981

00:44:13,480 --> 00:44:10,700

to enjoy and listen to I'm still not

982

00:44:15,130 --> 00:44:13,490

sure who that Brian donut was in the

983

00:44:18,279 --> 00:44:15,140

middle of the show if you have an idea

984

00:44:20,920 --> 00:44:18,289

why don't you tweet it tweet here is at

985

00:44:23,400 --> 00:44:20,930

skeptic zone if you think you know who

986

00:44:27,910 --> 00:44:23,410

might that might be and I bet you don't

987

00:44:29,980 --> 00:44:27,920

have a guess have a tweet but until next

988

00:44:36,970 --> 00:44:29,990

week this is Richard Saunders signing

989

00:44:40,240 --> 00:44:36,980

off from Sydney Australia you've been

990

00:44:44,769 --> 00:44:40,250

listening to the skeptic zone visit our

991

00:44:47,259 --> 00:44:44,779

website at [www.skeptics on TV](http://www.skepticsontv.com) for