

**The Skeptic Zone**



**Benjamin Radford**

**Show 149 - 27 Aug 2011**

1  
00:00:13,459 --> 00:00:03,379  
drama also Talia caras skeptics on

2  
00:00:16,129 --> 00:00:13,469  
podcast Nicodemus welcome to the skeptic

3  
00:00:32,880 --> 00:00:16,139  
zone the podcast from Australia for

4  
00:00:44,140 --> 00:00:35,880  
yes it's the skeptics are episode number

5  
00:00:47,700 --> 00:00:44,150  
149 for the 27th of foremost 2011 widget

6  
00:00:50,500 --> 00:00:47,710  
sauce is coming to you from circularity

7  
00:00:54,130 --> 00:00:50,510  
so can I get you here and see me down on

8  
00:00:56,649 --> 00:00:54,140  
Sydney Harbour right off the city very

9  
00:00:59,140 --> 00:00:56,659  
popular tourist spot and it's where many

10  
00:01:00,729 --> 00:00:59,150  
people take ferry boats to get around

11  
00:01:03,369 --> 00:01:00,739  
the harbor which I will be doing very

12  
00:01:05,160 --> 00:01:03,379  
soon and that lovely singing you can

13  
00:01:09,080 --> 00:01:05,170

hear in the background is a busker

14

00:01:12,560 --> 00:01:09,090

dressed up like somebody from

15

00:01:15,370 --> 00:01:12,570

who here at Second World War 1940s she's

16

00:01:18,139 --> 00:01:15,380

got a furry costume on the hair

17

00:01:20,779 --> 00:01:18,149

old-fashioned microphone she's a very

18

00:01:22,370 --> 00:01:20,789

good stick for a busker I think it's

19

00:01:24,559 --> 00:01:22,380

such a nice day here in Sydney I thought

20

00:01:27,889 --> 00:01:24,569

I'd come down work on the show on my

21

00:01:30,889 --> 00:01:27,899

little netbook and have an enjoyable

22

00:01:33,649 --> 00:01:30,899

ride harbor well what's coming up on

23

00:01:35,899 --> 00:01:33,659

this week's show we have part two of

24

00:01:41,300 --> 00:01:35,909

doctor reaches interview with Benjamin

25

00:01:43,639 --> 00:01:41,310

Radford investigator the paranormal

26  
00:01:46,219 --> 00:01:43,649  
investigator investigator of strange and

27  
00:01:47,929 --> 00:01:46,229  
mysterious things in part to Ben

28  
00:01:50,870 --> 00:01:47,939  
continues he's talked about the

29  
00:01:53,510 --> 00:01:50,880  
chupacabra and his investigations into

30  
00:01:56,809 --> 00:01:53,520  
that mysterious monster and also his

31  
00:01:59,270 --> 00:01:56,819  
investigations into plagiarism that's

32  
00:02:01,999 --> 00:01:59,280  
coming up at the start of the show and

33  
00:02:05,779 --> 00:02:02,009  
following that we have a little side

34  
00:02:08,180 --> 00:02:05,789  
trip I did last weekend I went to see a

35  
00:02:11,990 --> 00:02:08,190  
show called fact or fiction put on my

36  
00:02:14,900 --> 00:02:12,000  
end stove now in Stowe is the it's the

37  
00:02:17,000 --> 00:02:14,910  
only research reactor in Australia and

38  
00:02:19,309 --> 00:02:17,010

it's a suburb called Lucas Heights and

39

00:02:22,160 --> 00:02:19,319

they've started a really interesting

40

00:02:23,900 --> 00:02:22,170

outreach program to well educate the

41

00:02:26,140 --> 00:02:23,910

general public about exactly what goes

42

00:02:30,490 --> 00:02:26,150

on at the reactor

43

00:02:32,500 --> 00:02:30,500

and I attended their show and spoke to a

44

00:02:35,770 --> 00:02:32,510

lot of the scientists who were there on

45

00:02:38,350 --> 00:02:35,780

hand it was a fantastic time and I hope

46

00:02:41,429 --> 00:02:38,360

you'll get a lot out of the interviews

47

00:02:44,199 --> 00:02:41,439

coming up towards the end of the show

48

00:02:46,869 --> 00:02:44,209

well I'm down here near wolf number

49

00:02:51,190 --> 00:02:46,879

three wolf number three and that's going

50

00:02:53,740 --> 00:02:51,200

to be my fairy ferry boat to the seaside

51

00:02:59,069 --> 00:02:53,750

suburb of manly here in city an

52

00:03:03,819 --> 00:03:01,210

she's going up again with their world

53

00:03:06,879 --> 00:03:03,829

war two songs so why I queue up for my

54

00:03:23,820 --> 00:03:06,889

fairy I'll let you enjoy the skeptic

55

00:03:33,670 --> 00:03:27,190

now it's time for dr. Rachel reports

56

00:03:37,120 --> 00:03:33,680

with dr. Rachel Dunlop yeah I mean

57

00:03:38,770 --> 00:03:37,130

basically I I did I'm convinced that I

58

00:03:40,960 --> 00:03:38,780

solved the mystery and I don't say that

59

00:03:43,210 --> 00:03:40,970

lightly you know I've been doing these

60

00:03:48,280 --> 00:03:43,220

sorts investigations for 12 years now

61

00:03:51,670 --> 00:03:48,290

and there I I'm well aware that you know

62

00:03:54,430 --> 00:03:51,680

in science you know the the whatever the

63

00:03:55,660 --> 00:03:54,440

state of the evidence is is is is the

64

00:03:57,759 --> 00:03:55,670

currency of evidence and if there's no

65

00:03:59,440 --> 00:03:57,769

evidence coming up then then all you

66

00:04:02,920 --> 00:03:59,450

know all conclusions are risible and

67

00:04:04,840 --> 00:04:02,930

that's fine so I'm I'm I'm probably more

68

00:04:07,150 --> 00:04:04,850

cautious than most people about claiming

69

00:04:10,240 --> 00:04:07,160

to have solved a big mystery but in this

70

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

case I really have and and I believe

71

00:04:15,220 --> 00:04:12,350

I've had and you know it's the results

72

00:04:16,750 --> 00:04:15,230

of tough you know five years research if

73

00:04:19,509 --> 00:04:16,760

there's anything I've missed I mean I

74

00:04:21,880 --> 00:04:19,519

welcome criticism and if there's if

75

00:04:24,310 --> 00:04:21,890

anybody reads the book or thinks that I

76

00:04:27,159 --> 00:04:24,320

missed something unhappy to look at I

77

00:04:28,960 --> 00:04:27,169

mean I sincerely am but I don't know

78

00:04:31,090 --> 00:04:28,970

there's no there's no questions

79

00:04:32,710 --> 00:04:31,100

remaining that I all the different

80

00:04:34,570 --> 00:04:32,720

pieces of the puzzle are finally put

81

00:04:37,360 --> 00:04:34,580

together and parted reason I was able to

82

00:04:39,340 --> 00:04:37,370

do that is that is that the the

83

00:04:42,310 --> 00:04:39,350

chupacabra again it's only 15 years old

84

00:04:44,020 --> 00:04:42,320

and so there was a finite data set for

85

00:04:45,370 --> 00:04:44,030

me to work from there's only so many

86

00:04:46,830 --> 00:04:45,380

reports there's only so many books

87

00:04:50,440 --> 00:04:46,840

there's only so many references to it

88

00:04:52,900 --> 00:04:50,450

and so you know I don't think I could

89

00:04:55,840 --> 00:04:52,910

ever say definitively that I solved

90

00:04:57,760 --> 00:04:55,850

Bigfoot just because it's so massive

91

00:04:59,290 --> 00:04:57,770

there are so many reports there's so

92

00:05:02,529 --> 00:04:59,300

many hoaxes it's been so contaminated

93

00:05:04,240 --> 00:05:02,539

with just you know just tracks and just

94

00:05:07,480 --> 00:05:04,250

just eyewitness reports and then

95

00:05:10,960 --> 00:05:07,490

disputed you know films and it's too

96

00:05:12,909 --> 00:05:10,970

massive at least for me to to really say

97

00:05:14,469 --> 00:05:12,919

that I had you know but that I pull a

98

00:05:15,820 --> 00:05:14,479

lot together into one poem that really

99

00:05:17,650 --> 00:05:15,830

dependably solves it because there's

100

00:05:20,050 --> 00:05:17,660

there's so many loose ends same thing

101  
00:05:22,390 --> 00:05:20,060  
with the Loch Ness monster in the case

102  
00:05:24,520 --> 00:05:22,400  
of chupacabra I think it was it was a

103  
00:05:25,080 --> 00:05:24,530  
big enough mystery for me to tackle and

104  
00:05:30,030 --> 00:05:25,090  
that I

105  
00:05:31,710 --> 00:05:30,040  
but it would get small enough and it was

106  
00:05:33,300 --> 00:05:31,720  
it was you know they were there were few

107  
00:05:34,740 --> 00:05:33,310  
enough reports and sightings that I was

108  
00:05:37,950 --> 00:05:34,750  
able to sort of get my mind around it

109  
00:05:39,990 --> 00:05:37,960  
and piece it all together so I me and

110  
00:05:41,820 --> 00:05:40,000  
unlike salable of this monster and

111  
00:05:45,840 --> 00:05:41,830  
Bigfoot you had carcasses as well

112  
00:05:47,610 --> 00:05:45,850  
exactly the neo chicken chupacabra

113  
00:05:49,680 --> 00:05:47,620

exhibit on it that's a very good point

114

00:05:51,240 --> 00:05:49,690

exactly right I mean that's that and

115

00:05:52,800 --> 00:05:51,250

that's a big part of it was that was

116

00:05:54,840 --> 00:05:52,810

that you know that once you have the

117

00:05:56,670 --> 00:05:54,850

carcasses the sort of science takes the

118

00:05:58,710 --> 00:05:56,680

science and forensic sort of takes care

119

00:06:02,129 --> 00:05:58,720

of itself and you still have to sort of

120

00:06:03,510 --> 00:06:02,139

put it in context mo Browns but and

121

00:06:05,460 --> 00:06:03,520

actually that's why you know a good

122

00:06:07,170 --> 00:06:05,470

third of the book is devoted to the the

123

00:06:09,390 --> 00:06:07,180

the cultural aspects and the folklore

124

00:06:12,240 --> 00:06:09,400

aspects because again ultimately the

125

00:06:13,530 --> 00:06:12,250

chupacabras vampire so I have I have a

126

00:06:15,450 --> 00:06:13,540

couple sections in the book talking

127

00:06:17,640 --> 00:06:15,460

about the history of vampires and you

128

00:06:19,170 --> 00:06:17,650

look at European vampires and Latin

129

00:06:23,279 --> 00:06:19,180

American vampires and even African

130

00:06:24,570 --> 00:06:23,289

vampires and when you again we look at

131

00:06:28,040 --> 00:06:24,580

in the broader social and cultural

132

00:06:32,040 --> 00:06:28,050

context chupacabra fits very nicely into

133

00:06:35,640 --> 00:06:32,050

into what you would expect a 21st

134

00:06:37,350 --> 00:06:35,650

century or 20th century you know Puerto

135

00:06:40,409 --> 00:06:37,360

Rican vampire would look like I mean

136

00:06:42,480 --> 00:06:40,419

it's it's it's it fits perfectly right

137

00:06:44,430 --> 00:06:42,490

there and so it's it was neat to sort of

138

00:06:46,170 --> 00:06:44,440

be able to sort of again look at it from

139

00:06:48,450 --> 00:06:46,180

a from a folklore point of view from our

140

00:06:51,060 --> 00:06:48,460

forensics point of view my witness point

141

00:06:53,850 --> 00:06:51,070

of view and then you know being able to

142

00:06:55,650 --> 00:06:53,860

actually finally track down the the

143

00:06:57,210 --> 00:06:55,660

origins of chupacabra because that was

144

00:06:59,969 --> 00:06:57,220

the main part of the mystery other

145

00:07:02,879 --> 00:06:59,979

people had talked about aspects of you

146

00:07:04,379 --> 00:07:02,889

know the chip covers being coyotes for

147

00:07:07,080 --> 00:07:04,389

example in the chupacabras and this and

148

00:07:09,210 --> 00:07:07,090

that but nobody had really addressed the

149

00:07:12,420 --> 00:07:09,220

the central key issue with which is

150

00:07:14,070 --> 00:07:12,430

where did it come from where because it

151

00:07:15,600 --> 00:07:14,080

came out of this lab year

152

00:07:17,309 --> 00:07:15,610

the cheaper for in the middle of the

153

00:07:19,140 --> 00:07:17,319

jump well there's actually there's

154

00:07:20,960 --> 00:07:19,150

actually two different origin theories

155

00:07:24,209 --> 00:07:20,970

which is interesting one of them is that

156

00:07:25,770 --> 00:07:24,219

if you talk to most Puerto Ricans and

157

00:07:27,920 --> 00:07:25,780

other people who will believe the

158

00:07:32,100 --> 00:07:27,930

chupacabra and there are many who do

159

00:07:35,309 --> 00:07:32,110

they they say that it's either an alien

160

00:07:37,409 --> 00:07:35,319

an extraterrestrial entity that you know

161

00:07:39,749 --> 00:07:37,419

it was visiting UFO and got out and

162

00:07:43,050 --> 00:07:39,759

escaped or something and then got away

163

00:07:45,689 --> 00:07:43,060

in aliens pet is one of the theories the

164

00:07:47,790 --> 00:07:45,699

other theory is that um that it's the

165

00:07:49,830 --> 00:07:47,800

result of genetic experiments like top

166

00:07:51,839 --> 00:07:49,840

secret sort of frankenstein like

167

00:07:55,309 --> 00:07:51,849

genetics experience and experiments in

168

00:07:57,360 --> 00:07:55,319

the Puerto Rican jungle and of course

169

00:07:59,339 --> 00:07:57,370

you know the reason they have to come up

170

00:08:01,499 --> 00:07:59,349

with these explanations these farfetch

171

00:08:04,980 --> 00:08:01,509

exhibitions because it only appeared in

172

00:08:06,240 --> 00:08:04,990

95 well you can I mean why would

173

00:08:08,610 --> 00:08:06,250

something suddenly appear well either

174

00:08:10,709 --> 00:08:08,620

because an alien dropped it here or it's

175

00:08:12,749 --> 00:08:10,719

a newly created created animal I mean

176

00:08:16,679 --> 00:08:12,759

yeah ultimately this is the only two

177

00:08:19,559 --> 00:08:16,689

things you can reach for and so and so

178

00:08:22,950 --> 00:08:19,569

as it turned out you know when I was

179

00:08:24,510 --> 00:08:22,960

able to track down the origin of the

180

00:08:27,659 --> 00:08:24,520

monster and exactly where it came from

181

00:08:29,369 --> 00:08:27,669

and what they eyewitness saw it fits in

182

00:08:31,619 --> 00:08:29,379

perfectly I mean it all it all comes

183

00:08:35,790 --> 00:08:31,629

together and I don't think we can lay my

184

00:08:39,649 --> 00:08:35,800

list is really hanging on been known to

185

00:08:43,889 --> 00:08:39,659

do with HR giger it does it does um the

186

00:08:46,199 --> 00:08:43,899

artist who did the sculptures and the ya

187

00:08:49,800 --> 00:08:46,209

when it was a fanboy yeah what happened

188

00:08:52,110 --> 00:08:49,810

was that um was that I had you know I

189

00:08:54,930 --> 00:08:52,120

had seen the original chupacabra and of

190

00:08:58,079 --> 00:08:54,940

course I interviewed mrs. tolentino who

191

00:09:00,810 --> 00:08:58,089

saw this thing and who's upon his who's

192

00:09:02,579 --> 00:09:00,820

sketch sort of went worldwide and other

193

00:09:06,199 --> 00:09:02,589

people other people sort of when they

194

00:09:09,430 --> 00:09:06,209

when later people went when people in

195

00:09:11,530 --> 00:09:09,440

1995-96 Puerto Rico

196

00:09:13,750 --> 00:09:11,540

talked about seeing the chupacabra they

197

00:09:15,250 --> 00:09:13,760

refer to her sketch as a template it

198

00:09:17,430 --> 00:09:15,260

wasn't like I saw some new creatures

199

00:09:19,660 --> 00:09:17,440

like that thing that she saw I saw that

200

00:09:21,760 --> 00:09:19,670

with a couple of details here and there

201

00:09:23,800 --> 00:09:21,770

so it was very very much a very

202

00:09:26,590 --> 00:09:23,810

influential template from which other

203

00:09:29,320 --> 00:09:26,600

people jus throwing Chupacabra sightings

204

00:09:31,360 --> 00:09:29,330

of data that had stained hands right yes

205

00:09:32,830 --> 00:09:31,370

absolutely it's important yeah

206

00:09:34,990 --> 00:09:32,840

absolutely in fact it was published in

207

00:09:37,180 --> 00:09:35,000

the front page of the local newspaper it

208

00:09:39,430 --> 00:09:37,190

was everywhere I mean the tabloids and

209

00:09:41,950 --> 00:09:39,440

again getting back to the the social

210

00:09:44,440 --> 00:09:41,960

media aspect the tabloids were

211

00:09:47,020 --> 00:09:44,450

sensational and they were they were in

212

00:09:49,000 --> 00:09:47,030

Puerto Rico and sure like you know it's

213

00:09:50,860 --> 00:09:49,010

were like oh I guess I ran in Elvis

214

00:09:52,750 --> 00:09:50,870

sightings because suddenly we have this

215

00:09:55,090 --> 00:09:52,760

new monster and they love it I mean this

216

00:09:57,340 --> 00:09:55,100

was rumor gossip you know tabloid

217

00:09:59,380 --> 00:09:57,350

sensationalism blood cells newspaper oh

218

00:10:00,940 --> 00:09:59,390

my god absolutely and so and so yeah

219

00:10:04,480 --> 00:10:00,950

they her her image went everywhere

220

00:10:06,580 --> 00:10:04,490

including on internet because again as I

221

00:10:08,080 --> 00:10:06,590

mentioned the the original chupacabra

222

00:10:11,020 --> 00:10:08,090

citing even though it had no actual

223

00:10:13,990 --> 00:10:11,030

connection to UFOs it was co-opted by

224

00:10:15,820 --> 00:10:14,000

the UFO community in Puerto Rico and

225

00:10:17,890 --> 00:10:15,830

they sort of put their own UFO spin on

226

00:10:21,070 --> 00:10:17,900

it and then that would help make it go

227

00:10:23,170 --> 00:10:21,080

worldwide and so you know so so in

228

00:10:26,020 --> 00:10:23,180

trying to sort of address the final

229

00:10:28,570 --> 00:10:26,030

kernel of the mystery you where where

230

00:10:30,250 --> 00:10:28,580

the hell did she see this thing and so I

231

00:10:32,200 --> 00:10:30,260

looked around I trying to figure out

232

00:10:33,400 --> 00:10:32,210

what you know what what might she have

233

00:10:35,590 --> 00:10:33,410

possibly seen that has these

234

00:10:38,020 --> 00:10:35,600

characteristics and I and you know what

235

00:10:39,820 --> 00:10:38,030

was new added in the island specifically

236

00:10:42,310 --> 00:10:39,830

in Puerto Rico at that time we're not

237

00:10:45,730 --> 00:10:42,320

talking you know 1892 France we're not

238

00:10:49,780 --> 00:10:45,740

talking you know 1978 Texas or you know

239

00:10:52,930 --> 00:10:49,790

1985 Auckland we're talking August 95

240

00:10:55,600 --> 00:10:52,940

Puerto Rico what new came to the island

241

00:10:58,120 --> 00:10:55,610

either physically culturally socially in

242

00:11:01,060 --> 00:10:58,130

some way that they might have resembled

243

00:11:04,110 --> 00:11:01,070

at and the answer is that there was a

244

00:11:06,579 --> 00:11:04,120

film that came out called species oh

245

00:11:07,970 --> 00:11:06,589

that came out in 95 and it was actually

246

00:11:10,880 --> 00:11:07,980

released

247

00:11:15,500 --> 00:11:10,890

in july in the united states including

248

00:11:19,610 --> 00:11:15,510

puerto rico and as it turns out the the

249

00:11:20,570 --> 00:11:19,620

creature and species is if you look at

250

00:11:22,100 --> 00:11:20,580

it in there's actually two different

251  
00:11:25,550 --> 00:11:22,110  
forms in one form it's a rather

252  
00:11:28,400 --> 00:11:25,560  
attractive blonde Canadian supermodel of

253  
00:11:30,890 --> 00:11:28,410  
course of course in the other form it is

254  
00:11:33,370 --> 00:11:30,900  
a non attractive Canadian supermodel in

255  
00:11:37,220 --> 00:11:33,380  
the form of a creature that almost

256  
00:11:40,100 --> 00:11:37,230  
identically resembles the chupacabra it

257  
00:11:42,410 --> 00:11:40,110  
is by little derivative she turn

258  
00:11:44,240 --> 00:11:42,420  
absolutely it is bipedal it has the

259  
00:11:47,750 --> 00:11:44,250  
spiked going down the back has a large

260  
00:11:48,980 --> 00:11:47,760  
wraparound eyes it's not completely

261  
00:11:50,570 --> 00:11:48,990  
identical I mean there there are a

262  
00:11:51,920 --> 00:11:50,580  
couple minor differences but I talked

263  
00:11:53,750 --> 00:11:51,930

about in the book I mean you just I

264

00:11:56,030 --> 00:11:53,760

think I identified about a dozen

265

00:11:58,010 --> 00:11:56,040

different different characteristics that

266

00:12:02,420 --> 00:11:58,020

are identical in both I mean that you

267

00:12:03,560 --> 00:12:02,430

can look at it right there and so I was

268

00:12:05,840 --> 00:12:03,570

like what the hell is this I mean this

269

00:12:07,910 --> 00:12:05,850

is there's this chupacabras known around

270

00:12:09,920 --> 00:12:07,920

the world as a famous monster blood

271

00:12:13,580 --> 00:12:09,930

sucking vampire monster and then there's

272

00:12:16,280 --> 00:12:13,590

this this monster in this movie that

273

00:12:18,920 --> 00:12:16,290

they seem to look a lot of life like

274

00:12:20,510 --> 00:12:18,930

well this is odd I talked to tolentino

275

00:12:22,880 --> 00:12:20,520

and she said yeah she'd seen the movie

276

00:12:25,340 --> 00:12:22,890

like how she'd also seen the movie yes

277

00:12:28,700 --> 00:12:25,350

you've seen the movie before August 95

278

00:12:31,040 --> 00:12:28,710

yes and in fact um it gets even more

279

00:12:35,290 --> 00:12:31,050

interesting because i had um I actually

280

00:12:38,060 --> 00:12:35,300

dug up an interview with her in 1996 and

281

00:12:40,340 --> 00:12:38,070

she says she saw the movie species in

282

00:12:45,410 --> 00:12:40,350

fact she knows she say that she says

283

00:12:46,820 --> 00:12:45,420

that the the similarity between the the

284

00:12:50,079 --> 00:12:46,830

monster and the movie species and the

285

00:12:51,970 --> 00:12:50,089

chupacabra the she saw was remarkable

286

00:12:54,549 --> 00:12:51,980

I'm thinking well she just gave it away

287

00:12:56,499 --> 00:12:54,559

an antimatter bins easy she did

288

00:12:58,929 --> 00:12:56,509

everybody picked I know but nobody

289

00:13:00,129 --> 00:12:58,939

noticed it until and it was remarkable

290

00:13:02,650 --> 00:13:00,139

because like when I went back him like

291

00:13:04,480 --> 00:13:02,660

oh my god she says it right she says it

292

00:13:06,160 --> 00:13:04,490

right there yeah and because and

293

00:13:08,920 --> 00:13:06,170

actually that was important because

294

00:13:10,600 --> 00:13:08,930

later on at one point some a

295

00:13:13,329 --> 00:13:10,610

cryptozoologist sort of accused me

296

00:13:14,980 --> 00:13:13,339

leading the witness well you know I they

297

00:13:17,619 --> 00:13:14,990

said well you know I think you know your

298

00:13:19,540 --> 00:13:17,629

theory is kind of interesting but you

299

00:13:20,949 --> 00:13:19,550

know I how do we know that you saw ahead

300

00:13:22,239 --> 00:13:20,959

time you couldn't couldn't it be that

301

00:13:23,470 --> 00:13:22,249

you just saw this thing you're like hey

302

00:13:26,499 --> 00:13:23,480

couldn't it look like that I said well

303

00:13:31,299 --> 00:13:26,509

she said it except you're assuming that

304

00:13:33,069 --> 00:13:31,309

I sort of went back in time to 96 and I

305

00:13:37,299 --> 00:13:33,079

took the guise of someone who I don't

306

00:13:39,460 --> 00:13:37,309

know a total UFO interviewer who asked

307

00:13:41,019 --> 00:13:39,470

her about that it's like no this is this

308

00:13:43,090 --> 00:13:41,029

is all right there you have a lot of

309

00:13:45,309 --> 00:13:43,100

powers but not that yeah I'm not that

310

00:13:47,530 --> 00:13:45,319

good and and it gets even more

311

00:13:49,119 --> 00:13:47,540

interesting because the parallels just

312

00:13:51,090 --> 00:13:49,129

grow and grow and grow the more the more

313

00:13:54,489 --> 00:13:51,100

you look at it including the fact that

314

00:13:56,049 --> 00:13:54,499

as I mentioned the main two theories

315

00:13:58,059 --> 00:13:56,059

about where the chupacabra came from

316

00:13:59,860 --> 00:13:58,069

ours that it's an extraterrestrial or

317

00:14:02,980 --> 00:13:59,870

that it's the result of top secret US

318

00:14:05,590 --> 00:14:02,990

government genetic experiments as it

319

00:14:08,079 --> 00:14:05,600

happens then went to monster in the

320

00:14:11,350 --> 00:14:08,089

movie species is both an

321

00:14:13,629 --> 00:14:11,360

extraterrestrial alien and results of us

322

00:14:16,660 --> 00:14:13,639

top secret government hex experiments no

323

00:14:19,419 --> 00:14:16,670

I way yeah the origin stories are

324

00:14:21,160 --> 00:14:19,429

identical now I see why you are happy to

325

00:14:23,499 --> 00:14:21,170

your comfortable to claim that you've

326

00:14:26,650 --> 00:14:23,509

solved this mystery yes and I mean it's

327

00:14:28,239 --> 00:14:26,660

all if it all lines up and it's like oh

328

00:14:30,009 --> 00:14:28,249

my god I mean that the origin stories

329

00:14:32,019 --> 00:14:30,019

are the same the characteristics are the

330

00:14:34,239 --> 00:14:32,029

same that there they identical they look

331

00:14:37,629 --> 00:14:34,249

identical the the witness who originally

332

00:14:39,730 --> 00:14:37,639

saw it says herself that they look very

333

00:14:42,460 --> 00:14:39,740

first not complete signal at markley

334

00:14:45,730 --> 00:14:42,470

similar and on top of that the creme de

335

00:14:47,169 --> 00:14:45,740

la creme for me the the genetic wha tour

336

00:14:51,309 --> 00:14:47,179

de force Minaj at all what have you call

337

00:14:54,100 --> 00:14:51,319

it that that was that the the very first

338

00:14:57,330 --> 00:14:54,110

scene in the film species is set in

339

00:14:59,580 --> 00:14:57,340

Puerto Rico it is not if the RFU making

340

00:15:01,680 --> 00:14:59,590

so at the Arecibo radio deserve ettore

341

00:15:04,380 --> 00:15:01,690

the very first scene is set into Puerto

342

00:15:06,210 --> 00:15:04,390

Rico and it was set in the film is set

343

00:15:09,150 --> 00:15:06,220

at that time it was set in the present

344

00:15:12,060 --> 00:15:09,160

day of 95 right so people in Puerto Rico

345

00:15:14,370 --> 00:15:12,070

including mrs. tolentino to them I'm not

346

00:15:18,060 --> 00:15:14,380

gonna say was documentary but it was it

347

00:15:19,770 --> 00:15:18,070

was very very likely they're like what

348

00:15:22,470 --> 00:15:19,780

the hell there's this sort of thing that

349

00:15:25,560 --> 00:15:22,480

happens to be if you haven't rapist

350

00:15:28,520 --> 00:15:25,570

exactly even there exactly and so and so

351

00:15:31,380 --> 00:15:28,530

so we know with with this discovery

352

00:15:33,300 --> 00:15:31,390

ultimately if you know if you're going

353

00:15:35,930 --> 00:15:33,310

to dismiss that either and then the only

354

00:15:40,220 --> 00:15:35,940

possible argument you can make is that

355

00:15:42,570 --> 00:15:40,230

it is complete coincidence it is just an

356

00:15:45,150 --> 00:15:42,580

astronomically bizarre complete

357

00:15:48,930 --> 00:15:45,160

coincidence that the the animal that she

358

00:15:51,480 --> 00:15:48,940

saw later called chupacabra happens to

359

00:15:54,710 --> 00:15:51,490

look exactly like the creature that she

360

00:15:59,910 --> 00:15:54,720

saw any film a week or two earlier oh

361

00:16:03,330 --> 00:15:59,920

now you know what it could be I'm not

362

00:16:05,100 --> 00:16:03,340

buying it and I think even even many of

363

00:16:06,390 --> 00:16:05,110

the people who believe in chupacabra if

364

00:16:07,800 --> 00:16:06,400

they read the book and they look at all

365

00:16:09,180 --> 00:16:07,810

their arguments that are laid out in the

366

00:16:12,030 --> 00:16:09,190

course there's much more to it in the

367

00:16:15,330 --> 00:16:12,040

book it's all there it's all there and

368

00:16:18,030 --> 00:16:15,340

and so yeah it's uh it's a remarkable

369

00:16:20,100 --> 00:16:18,040

ride it's a you know again this has been

370

00:16:22,620 --> 00:16:20,110

the longest running investigation of my

371

00:16:25,560 --> 00:16:22,630

career just but it sounds like it was

372

00:16:27,900 --> 00:16:25,570

really satisfying to I mean I guess not

373

00:16:30,510 --> 00:16:27,910

all your investigations tie up so neatly

374

00:16:33,600 --> 00:16:30,520

like this one yeah it most of them don't

375

00:16:35,160 --> 00:16:33,610

I mean I in my case I I end up solving

376

00:16:36,489 --> 00:16:35,170

of course many of the mysteries that I

377

00:16:37,629 --> 00:16:36,499

tackle and I

378

00:16:39,519 --> 00:16:37,639

you know have those in some of my other

379

00:16:42,009 --> 00:16:39,529

books like monster mysteries for example

380

00:16:44,589 --> 00:16:42,019

or scientific investigation but

381

00:16:48,159 --> 00:16:44,599

certainly the chupacabra is especially

382

00:16:49,149 --> 00:16:48,169

satisfying for me because is to the best

383

00:16:51,069 --> 00:16:49,159

of my knowledge one of the

384

00:16:55,479 --> 00:16:51,079

highest-profile solve mysteries in

385

00:16:57,519 --> 00:16:55,489

decades I mean I'm not I'm not I'm not

386

00:16:58,929 --> 00:16:57,529

I'm not bragging that I don't I honestly

387

00:17:01,269 --> 00:16:58,939

don't know of any other mysteries that

388

00:17:03,249 --> 00:17:01,279

are known around the world of such a

389

00:17:05,259 --> 00:17:03,259

high-profile maybe like the Bermuda

390

00:17:07,889 --> 00:17:05,269

Triangle the stuffed Larry khush did

391

00:17:11,169 --> 00:17:07,899

investigating that but ultimately I

392

00:17:13,689 --> 00:17:11,179

don't know of any other mysteries you

393

00:17:17,110 --> 00:17:13,699

know unexplained phenomena that are so

394

00:17:19,590 --> 00:17:17,120

well known in certain last couple

395

00:17:21,999 --> 00:17:19,600

decades that have been so conclusively

396

00:17:25,929 --> 00:17:22,009

debunked so how much height well have

397

00:17:28,389 --> 00:17:25,939

you had so far been a little bit um it's

398

00:17:33,009 --> 00:17:28,399

it's it's fascinating you know the the

399

00:17:34,330 --> 00:17:33,019

believers um the believers they don't

400

00:17:35,919 --> 00:17:34,340

read the book first of all I mean they

401  
00:17:38,860 --> 00:17:35,929  
the people who absolutely convinced the

402  
00:17:41,649 --> 00:17:38,870  
chupacabra zist but nothing I say here

403  
00:17:43,570 --> 00:17:41,659  
right none of my logical scientific

404  
00:17:46,060 --> 00:17:43,580  
explanations are going to going to

405  
00:17:48,340 --> 00:17:46,070  
dissuade them from the from their belief

406  
00:17:50,230 --> 00:17:48,350  
and so I really wrote the book for the

407  
00:17:51,340 --> 00:17:50,240  
open minded people people who are saying

408  
00:17:53,980 --> 00:17:51,350  
you know what there might be something

409  
00:17:56,950 --> 00:17:53,990  
there or or even really just the journey

410  
00:17:58,659 --> 00:17:56,960  
to me is interesting and you know if you

411  
00:18:00,639 --> 00:17:58,669  
want you can certainly turn to the last

412  
00:18:02,139 --> 00:18:00,649  
page of the book and and figure out

413  
00:18:04,359 --> 00:18:02,149

whether i think the chupacabra exists or

414

00:18:06,549 --> 00:18:04,369

not that that's all that's all well and

415

00:18:10,350 --> 00:18:06,559

good but I think that I think to my mind

416

00:18:12,549 --> 00:18:10,360

the value in it is is in in

417

00:18:14,259 --> 00:18:12,559

demonstrating how a mystery like this

418

00:18:16,570 --> 00:18:14,269

can be tackled and actually can be

419

00:18:18,100 --> 00:18:16,580

solved in fact in the last section of

420

00:18:20,200 --> 00:18:18,110

the book I talked about that you know

421

00:18:23,409 --> 00:18:20,210

what's what's the point writing a book

422

00:18:24,759 --> 00:18:23,419

that you know the skeptics about

423

00:18:26,560 --> 00:18:24,769

something the skeptics never believed

424

00:18:28,060 --> 00:18:26,570

existed in the first place and the

425

00:18:31,600 --> 00:18:28,070

believers aren't going to read it anyway

426

00:18:32,519 --> 00:18:31,610

and the answer is that at least when I

427

00:18:34,690 --> 00:18:32,529

talk about in the book is that

428

00:18:36,520 --> 00:18:34,700

ultimately my research isn't about the

429

00:18:38,800 --> 00:18:36,530

chupacabra

430

00:18:43,530 --> 00:18:38,810

because it almost certainly doesn't

431

00:18:46,930 --> 00:18:43,540

exist my research is about how how

432

00:18:50,110 --> 00:18:46,940

something that someone saw in a film can

433

00:18:53,350 --> 00:18:50,120

be taken literally and believed as a

434

00:18:56,140 --> 00:18:53,360

real actual breathing blood sucking

435

00:18:58,390 --> 00:18:56,150

creature by you know tens of thousand

436

00:19:00,850 --> 00:18:58,400

people around the world due to folklore

437

00:19:02,430 --> 00:19:00,860

due to misunderstandings due to poor

438

00:19:04,930 --> 00:19:02,440

critical thinking due to the mass media

439

00:19:06,400 --> 00:19:04,940

to me that's the real story here the

440

00:19:09,490 --> 00:19:06,410

real story isn't about this this little

441

00:19:11,920 --> 00:19:09,500

you know blood sucking vampire thing you

442

00:19:14,110 --> 00:19:11,930

have routes it's about it's about the

443

00:19:16,510 --> 00:19:14,120

the the social and cultural factors and

444

00:19:18,310 --> 00:19:16,520

the personal beliefs that led people to

445

00:19:21,180 --> 00:19:18,320

think it was and I think that in that

446

00:19:23,860 --> 00:19:21,190

context it actually has a much broader

447

00:19:27,670 --> 00:19:23,870

application and I think that you know a

448

00:19:29,770 --> 00:19:27,680

lot of the lessons and discussions that

449

00:19:31,960 --> 00:19:29,780

I have in there apply just as well to

450

00:19:33,910 --> 00:19:31,970

other other so-called paranormal

451  
00:19:35,860 --> 00:19:33,920  
mysteries in terms of you know examining

452  
00:19:38,230 --> 00:19:35,870  
the evidence is this for you is this not

453  
00:19:39,670 --> 00:19:38,240  
true who do we talk to about this you

454  
00:19:41,320 --> 00:19:39,680  
know how do we break this down analyze

455  
00:19:42,940 --> 00:19:41,330  
it I think you made a good point before

456  
00:19:45,040 --> 00:19:42,950  
though when you were comparing this

457  
00:19:47,620 --> 00:19:45,050  
particular mystery to say you mentioned

458  
00:19:49,420 --> 00:19:47,630  
Bigfoot because as you say Bigfoot is

459  
00:19:51,400 --> 00:19:49,430  
polluted with a whole lot of stuff isn't

460  
00:19:53,950 --> 00:19:51,410  
it with you with fakes and you know the

461  
00:19:56,020 --> 00:19:53,960  
fake corpse of racing times worse yes

462  
00:19:59,950 --> 00:19:56,030  
this this did seems to be quite clean

463  
00:20:03,190 --> 00:19:59,960

and um yeah not so noisy there wasn't

464

00:20:06,310 --> 00:20:03,200

too much noise yeah this is fairly new

465

00:20:10,330 --> 00:20:06,320

there's a lot less hoaxing um has anyone

466

00:20:12,220 --> 00:20:10,340

heist this is for cover no one is hopes

467

00:20:15,630 --> 00:20:12,230

to chupacabra there's been some almost

468

00:20:19,360 --> 00:20:15,640

certainly hoaxed tracks they put

469

00:20:22,600 --> 00:20:19,370

chupacabra tracks what you find is that

470

00:20:24,430 --> 00:20:22,610

is that in the end there's I'm sure

471

00:20:25,690 --> 00:20:24,440

there's some hoax reports as well like

472

00:20:28,240 --> 00:20:25,700

eyewitness sightings but if you're

473

00:20:30,520 --> 00:20:28,250

looking at that the chupacabra like the

474

00:20:31,810 --> 00:20:30,530

dead the dead dogs and coyotes no one's

475

00:20:32,700 --> 00:20:31,820

hooking though they're just they're just

476

00:20:33,810 --> 00:20:32,710

animals

477

00:20:35,700 --> 00:20:33,820

there's things they don't they don't

478

00:20:38,130 --> 00:20:35,710

understand they don't recognize yeah so

479

00:20:39,960 --> 00:20:38,140

that's really that's what they're

480

00:20:42,779 --> 00:20:39,970

looking at the the more interesting

481

00:20:45,750 --> 00:20:42,789

thing to me is is the conspiracy element

482

00:20:47,940 --> 00:20:45,760

to it because the chupacabra unlike

483

00:20:50,279 --> 00:20:47,950

Bigfoot and unlike nasan basically

484

00:20:53,220 --> 00:20:50,289

unlike any other monster has a very

485

00:20:55,860 --> 00:20:53,230

strong conspiracy theory element running

486

00:20:58,500 --> 00:20:55,870

through it everything from the switch

487

00:21:02,909 --> 00:20:58,510

carcasses that I mentioned in 19 in year

488

00:21:05,519 --> 00:21:02,919

two thousand in Managua Nicaragua the

489

00:21:07,560 --> 00:21:05,529

the conspiracy theories you know for

490

00:21:09,149 --> 00:21:07,570

example involving the UFOs I mean if

491

00:21:10,500 --> 00:21:09,159

it's a if it's UFOs then it's

492

00:21:12,750 --> 00:21:10,510

governments hiding that if it's a

493

00:21:15,360 --> 00:21:12,760

genetic experiment then of course the

494

00:21:17,789 --> 00:21:15,370

government hiding that and there was

495

00:21:20,549 --> 00:21:17,799

even rumors for example in Chile in

496

00:21:22,139 --> 00:21:20,559

South America that the chupacabra was

497

00:21:25,529 --> 00:21:22,149

the result of a collaboration between

498

00:21:28,440 --> 00:21:25,539

NASA and the Chilean government to

499

00:21:32,220 --> 00:21:28,450

create animals that could survive on

500

00:21:34,019 --> 00:21:32,230

Mars this is a conspiracy and yeah and

501  
00:21:35,460 --> 00:21:34,029  
tejas cuzo and it was just fascinating

502  
00:21:38,159 --> 00:21:35,470  
to me i kid i kept digging up these

503  
00:21:40,110 --> 00:21:38,169  
references to two conspiracies in and

504  
00:21:41,669 --> 00:21:40,120  
again this isn't this is something

505  
00:21:44,730 --> 00:21:41,679  
that's completely novel to my knowledge

506  
00:21:46,350 --> 00:21:44,740  
in cryptozoology so it's a it's a faster

507  
00:21:48,870 --> 00:21:46,360  
the true becomes a fascinating blend of

508  
00:21:51,630 --> 00:21:48,880  
you know of folklore and forensics and

509  
00:21:54,299 --> 00:21:51,640  
you apology and conspiracy theory sort

510  
00:21:55,950 --> 00:21:54,309  
of like wrapped up into this cuz I don't

511  
00:21:58,230 --> 00:21:55,960  
I don't know that is that conspiracy

512  
00:22:00,570 --> 00:21:58,240  
surrounding necio before no not really

513  
00:22:02,070 --> 00:22:00,580

right I didn't think I mean every now

514

00:22:03,990 --> 00:22:02,080

and then you'll find some some crackpot

515

00:22:08,159 --> 00:22:04,000

who believes that there's Bigfoot on ice

516

00:22:10,789 --> 00:22:08,169

and you know area 51 but effectively no

517

00:22:14,100 --> 00:22:10,799

I mean there there really isn't you know

518

00:22:16,380 --> 00:22:14,110

yeah there really aren't really anybody

519

00:22:17,460 --> 00:22:16,390

who's taken to who's credible to saying

520

00:22:18,690 --> 00:22:17,470

you know I think that you know the

521

00:22:20,519 --> 00:22:18,700

government knows more about Bigfoot and

522

00:22:22,950 --> 00:22:20,529

they're saying it's just partly because

523

00:22:25,350 --> 00:22:22,960

you know Rancher see the damn thing yeah

524

00:22:27,600 --> 00:22:25,360

from there from their backyards and

525

00:22:29,460 --> 00:22:27,610

whatever uh so it's kind of hard to say

526

00:22:32,010 --> 00:22:29,470

that the government is keeping it from

527

00:22:34,860 --> 00:22:32,020

us well it's right there if it's there

528

00:22:36,210 --> 00:22:34,870

but just before we finish up there was

529

00:22:38,130 --> 00:22:36,220

one thing I wanted to touch on bed and

530

00:22:39,450 --> 00:22:38,140

that was when you were doing the

531

00:22:42,830 --> 00:22:39,460

research for this you came across some

532

00:22:44,940 --> 00:22:42,840

interesting plagiarism I did I did which

533

00:22:47,700 --> 00:22:44,950

okay I guess it's kind of a nice example

534

00:22:49,430 --> 00:22:47,710

of how you go about the process of doing

535

00:22:52,560 --> 00:22:49,440

your research and you are very thorough

536

00:22:54,750 --> 00:22:52,570

so tell us about that sure yeah it was

537

00:22:57,539 --> 00:22:54,760

interesting I just after I had submitted

538

00:22:59,730 --> 00:22:57,549

the book to the publisher and it was it

539

00:23:03,840 --> 00:22:59,740

was acting the process of coming out I

540

00:23:05,250 --> 00:23:03,850

picked up a copy of a book I'll tell the

541

00:23:08,430 --> 00:23:05,260

title it's called the encyclopedia

542

00:23:12,720 --> 00:23:08,440

vampires by Teresa Chung CH è un gene

543

00:23:14,549 --> 00:23:12,730

and I picked it up at a bookstore and um

544

00:23:16,649 --> 00:23:14,559

because I'm injured in vampires and

545

00:23:19,799 --> 00:23:16,659

monsters I mean it's you know that's my

546

00:23:23,039 --> 00:23:19,809

thing so I drop you know Blair was 15 20

547

00:23:26,430 --> 00:23:23,049

books in the book and I read it and I

548

00:23:28,470 --> 00:23:26,440

was curious to see what what it said

549

00:23:30,230 --> 00:23:28,480

about the chupacabra because you know I

550

00:23:33,120 --> 00:23:30,240

have to know something like chupacabra

551

00:23:34,560 --> 00:23:33,130

just a little bit and so I flipped to it

552

00:23:35,760 --> 00:23:34,570

sure enough it had an entry in it so

553

00:23:39,480 --> 00:23:35,770

Michael this is interesting so I'm

554

00:23:41,340 --> 00:23:39,490

reading through it and much of it was

555

00:23:44,430 --> 00:23:41,350

wrong some of it was right you know it's

556

00:23:46,440 --> 00:23:44,440

sort of the standard mix but was odd was

557

00:23:50,190 --> 00:23:46,450

that I came across a reference to a guy

558

00:23:51,899 --> 00:23:50,200

who had the so the book claimed had been

559

00:23:53,310 --> 00:23:51,909

researching the chupacabra in and

560

00:23:55,769 --> 00:23:53,320

actually looking for it in the jungles

561

00:23:58,830 --> 00:23:55,779

of South America for apparently a long

562

00:24:01,330 --> 00:23:58,840

time now this check out to me is off for

563

00:24:02,980 --> 00:24:01,340

a couple reasons number one

564

00:24:04,690 --> 00:24:02,990

there's not that many reports in South

565

00:24:06,250 --> 00:24:04,700

America like in terms of the carcasses I

566

00:24:07,960 --> 00:24:06,260

mean there's I mean there are reports of

567

00:24:09,580 --> 00:24:07,970

America but I don't think that there's

568

00:24:11,290 --> 00:24:09,590

nothing anybody would early be spending

569

00:24:13,060 --> 00:24:11,300

months and months in the jungles of

570

00:24:15,010 --> 00:24:13,070

Brazil earning I was looking for the

571

00:24:17,560 --> 00:24:15,020

damn thing and second of all I hadn't

572

00:24:19,480 --> 00:24:17,570

heard of this guy and you know I mean

573

00:24:21,040 --> 00:24:19,490

I'm not perfect i mean i'm sure i've

574

00:24:23,410 --> 00:24:21,050

missed facts and I don't you know i'm

575

00:24:24,730 --> 00:24:23,420

not you know I so it's possible that i

576

00:24:26,620 --> 00:24:24,740

just had just not come across this

577

00:24:28,450 --> 00:24:26,630

person's name before so i was curious

578

00:24:29,770 --> 00:24:28,460

like how did I miss this guy's name he's

579

00:24:33,460 --> 00:24:29,780

apparently important to become

580

00:24:34,750 --> 00:24:33,470

researcher so I am I went on the

581

00:24:37,600 --> 00:24:34,760

internet and I did a google search for

582

00:24:39,280 --> 00:24:37,610

this guy's name and in a strange thing

583

00:24:41,890 --> 00:24:39,290

happened which is that what came up was

584

00:24:43,840 --> 00:24:41,900

an identical passage as to what was in

585

00:24:45,580 --> 00:24:43,850

the book and i still had i still know

586

00:24:47,110 --> 00:24:45,590

who the guy is it could be a fictional

587

00:24:48,550 --> 00:24:47,120

why don't you know that is but it was

588

00:24:50,350 --> 00:24:48,560

curious because like well that's weird

589

00:24:52,540 --> 00:24:50,360

that that's exactly the same phrasing is

590

00:24:57,750 --> 00:24:52,550

in the book and i realized that the

591

00:25:00,130 --> 00:24:57,760

soccer plagiarized that that section and

592

00:25:03,430 --> 00:25:00,140

so I started looking more closely at it

593

00:25:05,560 --> 00:25:03,440

and and because i have a pretty decent

594

00:25:08,050 --> 00:25:05,570

library of monster egypt cover stuff in

595

00:25:10,510 --> 00:25:08,060

my house i was able to get load

596

00:25:13,270 --> 00:25:10,520

references right away as it turned out I

597

00:25:15,340 --> 00:25:13,280

think about eighty percent of the entry

598

00:25:17,410 --> 00:25:15,350

was directly plagiarized from the

599

00:25:19,390 --> 00:25:17,420

internet what the author different

600

00:25:22,390 --> 00:25:19,400

websites are from different websites and

601  
00:25:24,070 --> 00:25:22,400  
also from also from various books but

602  
00:25:25,870 --> 00:25:24,080  
oftentimes it was when someone had

603  
00:25:29,410 --> 00:25:25,880  
quoted the book from the internet right

604  
00:25:31,510 --> 00:25:29,420  
so so actually it was I'm just like Oh

605  
00:25:34,180 --> 00:25:31,520  
My gods i'm reading this stuff and and

606  
00:25:37,510 --> 00:25:34,190  
so what end up doing is I i photocopied

607  
00:25:39,580 --> 00:25:37,520  
the entry on chupacabra and I took four

608  
00:25:42,820 --> 00:25:39,590  
or five different colors of highlighter

609  
00:25:44,230 --> 00:25:42,830  
and I highlighted each one and I had

610  
00:25:45,700 --> 00:25:44,240  
each reference so that could you know

611  
00:25:46,990 --> 00:25:45,710  
pink as this reference green as

612  
00:25:49,120 --> 00:25:47,000  
reference loses reverence yellows

613  
00:25:51,610 --> 00:25:49,130

reverence and at the end of the day

614

00:25:54,190 --> 00:25:51,620

again as I recall that eighty percent of

615

00:25:55,720 --> 00:25:54,200

it was directly plagiarized from other

616

00:25:57,670 --> 00:25:55,730

sources every now and then she throwin

617

00:26:00,580 --> 00:25:57,680

like a name but for the most part it was

618

00:26:02,020 --> 00:26:00,590

just cutting and pasting so I'm like

619

00:26:03,370 --> 00:26:02,030

well and it just pissed me off for a

620

00:26:05,200 --> 00:26:03,380

couple reasons number one is that you

621

00:26:07,960 --> 00:26:05,210

know I pride myself on good scholarship

622

00:26:09,270 --> 00:26:07,970

that's what I do and second of all if

623

00:26:11,320 --> 00:26:09,280

you're going to plagiarize somebody

624

00:26:13,410 --> 00:26:11,330

plagiarize me

625

00:26:16,860 --> 00:26:13,420

at least I know what I'm talking about

626

00:26:20,820 --> 00:26:16,870

it's like it was I was offended that

627

00:26:23,410 --> 00:26:20,830

symptom 8 no not only is it wrong it's

628

00:26:25,090 --> 00:26:23,420

plagiarizing rod for Christ's sakes I

629

00:26:27,580 --> 00:26:25,100

mean I surprising me yeah I mean if you

630

00:26:29,230 --> 00:26:27,590

can at least if she plagiarized me than

631

00:26:31,000 --> 00:26:29,240

the in frame should be right because

632

00:26:33,250 --> 00:26:31,010

this is all about you it's all about me

633

00:26:35,590 --> 00:26:33,260

absolutely yeah and so anyway so I'm

634

00:26:39,370 --> 00:26:35,600

looking at this and then you need long

635

00:26:44,470 --> 00:26:39,380

story short so I that this was probably

636

00:26:47,230 --> 00:26:44,480

not the only reference this is probably

637

00:26:49,660 --> 00:26:47,240

not the only reference to to the

638

00:26:51,040 --> 00:26:49,670

chupacabra that was this front on the

639

00:26:53,320 --> 00:26:51,050

reference in the book it was plagiarized

640

00:26:55,320 --> 00:26:53,330

is played right because you know what

641

00:26:58,150 --> 00:26:55,330

you have to understand is that of course

642

00:27:01,420 --> 00:26:58,160

the the reason that I was able to go

643

00:27:03,190 --> 00:27:01,430

through and be the recognizer stuff is

644

00:27:04,720 --> 00:27:03,200

because I know the material but the

645

00:27:06,400 --> 00:27:04,730

problem is the average person who buys

646

00:27:08,710 --> 00:27:06,410

that book they're not going to know any

647

00:27:09,850 --> 00:27:08,720

better they don't they can't just skim

648

00:27:10,960 --> 00:27:09,860

through that know what's right what's

649

00:27:12,130 --> 00:27:10,970

wrong because they don't have the

650

00:27:13,180 --> 00:27:12,140

expertise and there's no reason they

651  
00:27:15,550 --> 00:27:13,190  
would it's probably why they buy the

652  
00:27:17,260 --> 00:27:15,560  
books I can learn right exactly exactly

653  
00:27:18,940 --> 00:27:17,270  
so that's when the problems it is that

654  
00:27:20,290 --> 00:27:18,950  
is that is that the average person

655  
00:27:25,420 --> 00:27:20,300  
doesn't have a clue what's what's good

656  
00:27:28,390 --> 00:27:25,430  
information was bad and so um so you

657  
00:27:30,670 --> 00:27:28,400  
know anyway so then I actually I did

658  
00:27:32,440 --> 00:27:30,680  
some research based on the premise that

659  
00:27:35,350 --> 00:27:32,450  
I probably hadn't stumbled across the

660  
00:27:39,520 --> 00:27:35,360  
one injury that was plagiarized it's

661  
00:27:41,530 --> 00:27:39,530  
possible but I'm skeptical so I did some

662  
00:27:44,620 --> 00:27:41,540  
research along with a colleague of mine

663  
00:27:47,020 --> 00:27:44,630

Josh hunt helped me out and we spot

664

00:27:49,370 --> 00:27:47,030

checked the rest of the encyclopedia and

665

00:27:52,820 --> 00:27:49,380

a funny thing happened

666

00:27:56,600 --> 00:27:52,830

wow I wonder what it was well I won't

667

00:27:58,160 --> 00:27:56,610

keep you in suspense well over half of

668

00:27:59,630 --> 00:27:58,170

the entries that we spot check were had

669

00:28:01,430 --> 00:27:59,640

been directly plagiarized from the

670

00:28:05,270 --> 00:28:01,440

internet in fact I thing was closer to

671

00:28:07,280 --> 00:28:05,280

two thirds and basically with the the

672

00:28:09,530 --> 00:28:07,290

the the technique we did we just sort of

673

00:28:12,170 --> 00:28:09,540

randomly chose entries and we would

674

00:28:13,700 --> 00:28:12,180

select a phrase that seem like you seem

675

00:28:15,200 --> 00:28:13,710

to unique like a name plus a couple

676

00:28:17,950 --> 00:28:15,210

words on either side of it would just

677

00:28:20,360 --> 00:28:17,960

didn't enter them into google search and

678

00:28:22,690 --> 00:28:20,370

sometimes the the information was so

679

00:28:24,830 --> 00:28:22,700

generic that nobody would ever I mean

680

00:28:26,480 --> 00:28:24,840

it's so generic did it there's no way it

681

00:28:29,360 --> 00:28:26,490

would match up a lot of times however it

682

00:28:31,790 --> 00:28:29,370

did and so same way is it turns out

683

00:28:32,930 --> 00:28:31,800

again two-thirds of the book the sample

684

00:28:34,310 --> 00:28:32,940

that we I'm not saying the entire book

685

00:28:36,380 --> 00:28:34,320

the samples that we looked at two thirds

686

00:28:38,690 --> 00:28:36,390

of them were directly plagiarize and so

687

00:28:42,230 --> 00:28:38,700

I this was published through

688

00:28:45,620 --> 00:28:42,240

HarperCollins a fairly reputable yes pr2

689

00:28:47,510 --> 00:28:45,630

for fairly reputable a company is

690

00:28:49,040 --> 00:28:47,520

actually HarperCollins UK wasn't wasn't

691

00:28:50,870 --> 00:28:49,050

HarperCollins us which actually turned

692

00:28:53,060 --> 00:28:50,880

out to be an important distinction I

693

00:28:55,280 --> 00:28:53,070

contacted HarperCollins and I just

694

00:28:58,600 --> 00:28:55,290

politely inquired about what their

695

00:29:01,090 --> 00:28:58,610

policy isn't a tourism mm-hmm

696

00:29:05,440 --> 00:29:01,100

and I got a back a sort of cautious

697

00:29:09,070 --> 00:29:05,450

terse response bike well why do you want

698

00:29:11,830 --> 00:29:09,080

to know it's part along those lines and

699

00:29:13,630 --> 00:29:11,840

I said well I'm just I on this my name

700

00:29:15,280 --> 00:29:13,640

I'm a researcher and I believe it

701  
00:29:18,039 --> 00:29:15,290  
encounters plagiarism and we're looking

702  
00:29:20,320 --> 00:29:18,049  
into this and so I sort of got this back

703  
00:29:22,240 --> 00:29:20,330  
sort of you know generic well we

704  
00:29:24,690 --> 00:29:22,250  
encourage all our authors to the best

705  
00:29:26,830 --> 00:29:24,700  
standards hola so I said okay fine so I

706  
00:29:29,110 --> 00:29:26,840  
hadn't finished the kitten to believe me

707  
00:29:31,299 --> 00:29:29,120  
my research at that point and so I got

708  
00:29:32,830 --> 00:29:31,309  
back to them about um guess it was

709  
00:29:34,630 --> 00:29:32,840  
couple weeks later and when Josh and I

710  
00:29:36,070 --> 00:29:34,640  
had done more I was you could always

711  
00:29:38,350 --> 00:29:36,080  
keep doing more and more but it's at

712  
00:29:40,930 --> 00:29:38,360  
some point just cut it off and so I sent

713  
00:29:44,440 --> 00:29:40,940

the this representative I believe it was

714

00:29:47,680 --> 00:29:44,450

a 10 page email uh in page even 10 page

715

00:29:51,370 --> 00:29:47,690

email um and also because I implied or

716

00:29:54,100 --> 00:29:51,380

as you well know the three pages of it

717

00:29:57,760 --> 00:29:54,110

was was was my discussion the remaining

718

00:30:00,789 --> 00:29:57,770

seven pages was was I was saying just so

719

00:30:05,470 --> 00:30:00,799

you know you know the entry on X pages

720

00:30:06,760 --> 00:30:05,480

the patron you know 38 235 / 30 39 this

721

00:30:08,680 --> 00:30:06,770

was directly played dress from this

722

00:30:10,150 --> 00:30:08,690

source here it is and I actually cut

723

00:30:12,280 --> 00:30:10,160

inpatient said you know this is what she

724

00:30:14,080 --> 00:30:12,290

said this is what's it worth this is

725

00:30:16,060 --> 00:30:14,090

what you said and I just laid it all out

726

00:30:19,080 --> 00:30:16,070

and said there's no mistaking this this

727

00:30:21,850 --> 00:30:19,090

is this is directly juris I mean there's

728

00:30:24,820 --> 00:30:21,860

show me how this is not even basically

729

00:30:27,220 --> 00:30:24,830

and let's look at some or close as I

730

00:30:28,900 --> 00:30:27,230

broke it down for them like we did I

731

00:30:32,289 --> 00:30:28,910

think it's I think we did five or six

732

00:30:34,539 --> 00:30:32,299

different entries and and so I said you

733

00:30:41,320 --> 00:30:34,549

know I'm what your wouldn't give any

734

00:30:43,330 --> 00:30:41,330

thoughts on this basically and and it

735

00:30:44,830 --> 00:30:43,340

was weird i waited for about a week or

736

00:30:47,740 --> 00:30:44,840

two and I finally got a response back

737

00:30:49,240 --> 00:30:47,750

something like well you know I know

738

00:30:50,740 --> 00:30:49,250

actually it know where your thoughts I

739

00:30:52,600 --> 00:30:50,750

had a couple other questions which is

740

00:30:54,490 --> 00:30:52,610

you know is it standard policy for your

741

00:30:55,990 --> 00:30:54,500

authors I mean do you do you expect your

742

00:30:58,600 --> 00:30:56,000

authors to do more than just cut and

743

00:31:01,020 --> 00:30:58,610

paste off google searches or that

744

00:31:02,980 --> 00:31:01,030

standard practice for harper collins but

745

00:31:07,120 --> 00:31:02,990

they didn't answer that question

746

00:31:08,850 --> 00:31:07,130

directly then another question was given

747

00:31:11,110 --> 00:31:08,860

the fact that so much of this has been

748

00:31:12,970 --> 00:31:11,120

plagiarized from other sources how can

749

00:31:15,370 --> 00:31:12,980

you verify that your non-fiction books

750

00:31:17,260 --> 00:31:15,380

are accurate because if you're a really

751

00:31:18,820 --> 00:31:17,270

good question yeah if you're if i buy a

752

00:31:20,440 --> 00:31:18,830

book and someone's name is on it I

753

00:31:22,870 --> 00:31:20,450

assume that the person whose name is on

754

00:31:24,760 --> 00:31:22,880

that book has researched it i mean you

755

00:31:26,049 --> 00:31:24,770

can quote other people but i have to

756

00:31:27,480 --> 00:31:26,059

assume that they didn't just take other

757

00:31:30,160 --> 00:31:27,490

people's words and ideas and thoughts

758

00:31:32,919 --> 00:31:30,170

and put them in as their own yeah and so

759

00:31:34,480 --> 00:31:32,929

if you're going to acknowledge and

760

00:31:35,770 --> 00:31:34,490

essentially they did acknowledge that

761

00:31:37,000 --> 00:31:35,780

there in fact had been played really

762

00:31:39,640 --> 00:31:37,010

mean there couldn't deny it it's right

763

00:31:41,530 --> 00:31:39,650

there but she's like well you know this

764

00:31:43,150 --> 00:31:41,540

was a massive undertaking and you know

765

00:31:47,530 --> 00:31:43,160

I'm sure there were mistakes that were

766

00:31:50,320 --> 00:31:47,540

made like well there's a difference

767

00:31:51,790 --> 00:31:50,330

between mistakes were made and most of

768

00:31:55,120 --> 00:31:51,800

your book was not written by your author

769

00:31:57,070 --> 00:31:55,130

yeah these are this is not just some

770

00:31:59,530 --> 00:31:57,080

things fell through the crack this is I

771

00:32:01,360 --> 00:31:59,540

would guess that most of your book with

772

00:32:05,740 --> 00:32:01,370

her name on it was not written by her

773

00:32:07,570 --> 00:32:05,750

yeah yeah um anyway I got back a it

774

00:32:10,720 --> 00:32:07,580

devolved into this sort of very terse

775

00:32:12,430 --> 00:32:10,730

annoyed you know if you have further

776

00:32:14,620 --> 00:32:12,440

questions contact our lawyers type stuff

777

00:32:16,120 --> 00:32:14,630

anyway so i'm going to write that up for

778

00:32:19,000 --> 00:32:16,130

skeptic inquire at some point soon but

779

00:32:21,160 --> 00:32:19,010

it was interesting just um just doesn't

780

00:32:23,970 --> 00:32:21,170

exercise because I I think that one of

781

00:32:26,080 --> 00:32:23,980

the reasons why there is so much

782

00:32:28,090 --> 00:32:26,090

mistaken information but about

783

00:32:30,730 --> 00:32:28,100

everything whether it's homeopathy or

784

00:32:33,760 --> 00:32:30,740

astrology or herbs all go route is that

785

00:32:36,280 --> 00:32:33,770

the lack of scholarship and and I really

786

00:32:37,960 --> 00:32:36,290

believe that editors are failing people

787

00:32:39,669 --> 00:32:37,970

in a lot of cases news editors book

788

00:32:41,860 --> 00:32:39,679

editors magazine article editor's

789

00:32:43,150 --> 00:32:41,870

because they're getting information and

790

00:32:45,700 --> 00:32:43,160

they're just pushing it back out there

791

00:32:48,340 --> 00:32:45,710

and you know I know for you know because

792

00:32:49,810 --> 00:32:48,350

i work on step inquire magazine if i get

793

00:32:51,880 --> 00:32:49,820

something and I question and I send it

794

00:32:52,900 --> 00:32:51,890

back to the author I query it if they

795

00:32:55,150 --> 00:32:52,910

don't address it he doesn't get

796

00:32:57,730 --> 00:32:55,160

published yeah I don't care if your PhD

797

00:32:59,320 --> 00:32:57,740

or not this is I'm a question about this

798

00:33:01,360 --> 00:32:59,330

if you can't justify this I'm going to

799

00:33:03,040 --> 00:33:01,370

take it out and if you have a problem

800

00:33:05,770 --> 00:33:03,050

that you can call me later but I'm not

801  
00:33:07,780 --> 00:33:05,780  
publishing this up and so you know so in

802  
00:33:10,120 --> 00:33:07,790  
my role in skeptical Inquirer magazine I

803  
00:33:12,520 --> 00:33:10,130  
take that very seriously

804  
00:33:13,780 --> 00:33:12,530  
and so because i want to know that that

805  
00:33:15,670 --> 00:33:13,790  
you know the information we're putting

806  
00:33:18,550 --> 00:33:15,680  
out there under our name written by

807  
00:33:21,880 --> 00:33:18,560  
these authors is right as factual is is

808  
00:33:23,050 --> 00:33:21,890  
logical and makes sense i'm not saying

809  
00:33:24,700 --> 00:33:23,060  
that I'm unique in that but that's

810  
00:33:26,710 --> 00:33:24,710  
certainly one thing that I try to do and

811  
00:33:29,110 --> 00:33:26,720  
I think the lot of times it's crystal

812  
00:33:31,030 --> 00:33:29,120  
clear that the editors they don't care

813  
00:33:32,770 --> 00:33:31,040

they just put it out there yeah but

814

00:33:34,810 --> 00:33:32,780

they're not I mean as a as a writer I

815

00:33:36,370 --> 00:33:34,820

write a little bit too and as might I

816

00:33:38,080 --> 00:33:36,380

would never put out something like that

817

00:33:39,970 --> 00:33:38,090

either you know I'm trained as a

818

00:33:41,950 --> 00:33:39,980

scientist so I reference everything i'm

819

00:33:44,710 --> 00:33:41,960

doing i'm sorry particular about that

820

00:33:46,150 --> 00:33:44,720

but that's from my training I would

821

00:33:48,550 --> 00:33:46,160

never plagiarize something because as a

822

00:33:50,560 --> 00:33:48,560

writer that's not what I would do every

823

00:33:52,210 --> 00:33:50,570

what you and I think that's the

824

00:33:54,550 --> 00:33:52,220

intersection is that you are a scientist

825

00:33:57,000 --> 00:33:54,560

and and you know I come from both

826

00:33:59,560 --> 00:33:57,010

science and journalism background and so

827

00:34:01,540 --> 00:33:59,570

so the idea of putting in references and

828

00:34:05,200 --> 00:34:01,550

citations it's like that's the default

829

00:34:07,720 --> 00:34:05,210

yeah exactly that is what you do I mean

830

00:34:09,159 --> 00:34:07,730

Lester my problem is I send stuff dennis

831

00:34:10,510 --> 00:34:09,169

is they take out a lot of that because

832

00:34:12,700 --> 00:34:10,520

they're like no we don't want a 15

833

00:34:14,770 --> 00:34:12,710

references we want four right so I

834

00:34:17,020 --> 00:34:14,780

thought myself anything nice down right

835

00:34:19,030 --> 00:34:17,030

that's the default right and and and

836

00:34:20,860 --> 00:34:19,040

what what people have to understand is

837

00:34:23,050 --> 00:34:20,870

that is that when you're looking at new

838

00:34:24,340 --> 00:34:23,060

age authors and certainly an image if

839

00:34:26,470 --> 00:34:24,350

you're Luke books on crystals and

840

00:34:29,680 --> 00:34:26,480

healings and Reiki and astrology and

841

00:34:30,909 --> 00:34:29,690

psychics UFO the vast majority of it i

842

00:34:32,950 --> 00:34:30,919

would say probably ninety five percent

843

00:34:34,300 --> 00:34:32,960

or more of it number one they're not

844

00:34:38,110 --> 00:34:34,310

written by people who have a background

845

00:34:41,200 --> 00:34:38,120

in science or academia so the i mean if

846

00:34:43,840 --> 00:34:41,210

you put a gun to their head they may put

847

00:34:45,190 --> 00:34:43,850

in a couple references you know just to

848

00:34:47,500 --> 00:34:45,200

sort of try and make it look scholarly

849

00:34:50,590 --> 00:34:47,510

but but a lot of times they they don't

850

00:34:52,030 --> 00:34:50,600

even and honestly my guess is that with

851

00:34:53,560 --> 00:34:52,040

that particular authors and turns out

852

00:34:55,600 --> 00:34:53,570

he'd written i think about a half dozen

853

00:34:56,980 --> 00:34:55,610

other books for HarperCollins right and

854

00:34:57,970 --> 00:34:56,990

I said you know by the way you might

855

00:34:59,830 --> 00:34:57,980

want to look at these other books

856

00:35:01,540 --> 00:34:59,840

because I suspect I haven't I haven't

857

00:35:04,000 --> 00:35:01,550

followed through my threat yet but I

858

00:35:05,410 --> 00:35:04,010

suspect that if I if I asked to go

859

00:35:07,790 --> 00:35:05,420

people to help me out and look for other

860

00:35:11,180 --> 00:35:07,800

plagiarism in her other books

861

00:35:13,460 --> 00:35:11,190

I'm guessing my yeah yeah so but I but

862

00:35:17,300 --> 00:35:13,470

at my my guess is that is that this

863

00:35:18,800 --> 00:35:17,310

author genuinely believed that doing

864

00:35:21,650 --> 00:35:18,810

Google searches for a subject and

865

00:35:23,690 --> 00:35:21,660

cutting and pasting material sometimes

866

00:35:25,550 --> 00:35:23,700

with attribution sometimes not he's

867

00:35:27,230 --> 00:35:25,560

writing I mean I haven't met her I

868

00:35:29,000 --> 00:35:27,240

haven't spoken to her my guess is that

869

00:35:32,390 --> 00:35:29,010

that that's her understanding of what

870

00:35:34,760 --> 00:35:32,400

writing research is and for some reason

871

00:35:36,890 --> 00:35:34,770

her editors and sub F just didn't

872

00:35:38,090 --> 00:35:36,900

correct that misconception about the

873

00:35:40,070 --> 00:35:38,100

howlitt that's not only that but

874

00:35:43,280 --> 00:35:40,080

apparently they didn't recognize the

875

00:35:45,320 --> 00:35:43,290

wildly varying styles because I well I

876

00:35:46,940 --> 00:35:45,330

mean she's a bit of a worry oh yeah yeah

877

00:35:49,190 --> 00:35:46,950

and I brought that up so if you do you

878

00:35:51,890 --> 00:35:49,200

find it troubling that your editors some

879

00:35:54,080 --> 00:35:51,900

who are named in the book um didn't

880

00:35:55,790 --> 00:35:54,090

notice that that your author that's a

881

00:35:58,190 --> 00:35:55,800

really cool charlie yeah managed to

882

00:36:00,140 --> 00:35:58,200

write in a wide variety of styles um

883

00:36:01,460 --> 00:36:00,150

that's a really good point because if

884

00:36:03,620 --> 00:36:01,470

she's written more than one book you

885

00:36:05,510 --> 00:36:03,630

expect it would be similar time you

886

00:36:09,050 --> 00:36:05,520

would think so and yet somehow the

887

00:36:11,870 --> 00:36:09,060

editors at HarperCollins either didn't

888

00:36:13,340 --> 00:36:11,880

notice or didn't care anyway so again i

889

00:36:16,820 --> 00:36:13,350

have it i don't i don't say too much

890

00:36:19,550 --> 00:36:16,830

because i don't wanna get sued well you

891

00:36:21,140 --> 00:36:19,560

know truth is the defense the plagiarism

892

00:36:23,960 --> 00:36:21,150

is right there and if they want to sue

893

00:36:25,790 --> 00:36:23,970

me then sue me let i'll get up in court

894

00:36:27,950 --> 00:36:25,800

will go through this line by line and

895

00:36:29,510 --> 00:36:27,960

you probably find more anyway oh yeah i

896

00:36:31,220 --> 00:36:29,520

mean this is yeah which is why i think

897

00:36:32,990 --> 00:36:31,230

that they i think at some point they

898

00:36:34,910 --> 00:36:33,000

said you know we're just gonna we're

899

00:36:37,100 --> 00:36:34,920

just gonna we're gonna cut this off here

900

00:36:40,370 --> 00:36:37,110

we're digging ourselves in a hole here

901  
00:36:43,700 --> 00:36:40,380  
at ethic um and so yeah I mean I again I

902  
00:36:45,770 --> 00:36:43,710  
you know I and at the end of our email

903  
00:36:47,450 --> 00:36:45,780  
discussion because it was getting very

904  
00:36:48,650 --> 00:36:47,460  
terse because she's like yeah I don't

905  
00:36:49,640 --> 00:36:48,660  
believe I'm going to answer your

906  
00:36:51,050 --> 00:36:49,650  
questions any further I've already

907  
00:36:53,330 --> 00:36:51,060  
interviewed questions before I said in

908  
00:36:55,400 --> 00:36:53,340  
fact you haven't but I said I'm sorry

909  
00:36:56,630 --> 00:36:55,410  
this has been a difficult I don't mean

910  
00:36:59,210 --> 00:36:56,640  
to be difficult i'm not trying to be

911  
00:37:02,390 --> 00:36:59,220  
nasty of noxious you need to realize

912  
00:37:04,400 --> 00:37:02,400  
that that if this has been a trying time

913  
00:37:06,050 --> 00:37:04,410

it's because you're author plagiarize

914

00:37:07,460 --> 00:37:06,060

yeah it's not because i'm being

915

00:37:09,680 --> 00:37:07,470

difficult because you're being an ass

916

00:37:12,350 --> 00:37:09,690

right right the problem isn't really the

917

00:37:14,300 --> 00:37:12,360

problem and your author chose to write a

918

00:37:15,559 --> 00:37:14,310

book by doing google searches and

919

00:37:16,999 --> 00:37:15,569

cutting and pasting

920

00:37:19,489 --> 00:37:17,009

that's where the problem lies let's be

921

00:37:22,430 --> 00:37:19,499

clear about that yeah well your book

922

00:37:26,509 --> 00:37:22,440

which has no plagiarism in it at all no

923

00:37:28,999 --> 00:37:26,519

and does have references and does it

924

00:37:32,209 --> 00:37:29,009

diversen references notes citations yeah

925

00:37:34,339 --> 00:37:32,219

and appendices I'm sorry it's called

926

00:37:36,529 --> 00:37:34,349

tracking the chupacabra the vampire

927

00:37:38,900 --> 00:37:36,539

based in fact fiction and phone call it

928

00:37:40,489 --> 00:37:38,910

isn't it's available now it is available

929

00:37:41,930 --> 00:37:40,499

it's available on Kindle is available

930

00:37:43,910 --> 00:37:41,940

through the University of New Mexico

931

00:37:45,589 --> 00:37:43,920

press which is a we can buy it in

932

00:37:47,029 --> 00:37:45,599

Australia you can buy in Australia you

933

00:37:51,140 --> 00:37:47,039

can buy it around the world you can get

934

00:37:54,259 --> 00:37:51,150

it on Amazon Kindle of course the

935

00:37:56,059 --> 00:37:54,269

hardcopy books I can sign in person but

936

00:37:57,979 --> 00:37:56,069

you know whatever I do I'm around yeah

937

00:37:59,779 --> 00:37:57,989

okay well then thanks once again for

938

00:38:02,209 --> 00:37:59,789

joining us on the skeptics I'm well

939

00:38:03,680 --> 00:38:02,219

thank you and um oh we can also give us

940

00:38:05,209 --> 00:38:03,690

your website to utilize yes i have i

941

00:38:07,309 --> 00:38:05,219

have a brand new website a spiffy new

942

00:38:08,930 --> 00:38:07,319

one it's called Benjamin Radford calm

943

00:38:11,959 --> 00:38:08,940

which in an America that's my full

944

00:38:13,609 --> 00:38:11,969

management B&J am and I'm sure I'm sure

945

00:38:15,439 --> 00:38:13,619

your list reverse Martin will put the

946

00:38:18,739 --> 00:38:15,449

links in there you go Benjamin overcame

947

00:38:20,359 --> 00:38:18,749

also read four books calm and yeah I've

948

00:38:22,370 --> 00:38:20,369

actually got another book coming out in

949

00:38:24,469 --> 00:38:22,380

a couple months with the sociologist

950

00:38:27,769 --> 00:38:24,479

actually who's Australia currently named

951  
00:38:30,109 --> 00:38:27,779  
Bob Bartholomew and I don't know the

952  
00:38:32,689 --> 00:38:30,119  
exact title i think it's the Martians

953  
00:38:35,089 --> 00:38:32,699  
have invaded a colorful history of the

954  
00:38:36,709 --> 00:38:35,099  
media panics and hoaxes oh wow that

955  
00:38:38,299 --> 00:38:36,719  
sounds it just yeah so we talk of

956  
00:38:41,269 --> 00:38:38,309  
everything from the world the world

957  
00:38:43,130 --> 00:38:41,279  
talks to the monkey man panic to phantom

958  
00:38:45,380 --> 00:38:43,140  
clowns I just got the chip cover a

959  
00:38:48,410 --> 00:38:45,390  
little bit so that will be coming out in

960  
00:38:49,729 --> 00:38:48,420  
a few months and then I've actually got

961  
00:38:51,620 --> 00:38:49,739  
a contract for another book for

962  
00:38:55,370 --> 00:38:51,630  
University of Mexico press on New Mexico

963  
00:38:57,979 --> 00:38:55,380

mysteries the book is doing in March and

964

00:39:01,999 --> 00:38:57,989

I have not started yet that's 2012 ah

965

00:39:04,489 --> 00:39:02,009

yes oh yeah well no the book is due to

966

00:39:05,839 --> 00:39:04,499

them to that March it'll be I don't know

967

00:39:07,519 --> 00:39:05,849

when it'll be I'd probably be at about a

968

00:39:10,699 --> 00:39:07,529

year after that but I worry yet it is

969

00:39:12,739 --> 00:39:10,709

july do you haven't started again well

970

00:39:15,109 --> 00:39:12,749

I've got it about a third written I'm

971

00:39:16,609 --> 00:39:15,119

working on it I'm working on I I that

972

00:39:17,920 --> 00:39:16,619

guide to come out to go to appearance as

973

00:39:19,900 --> 00:39:17,930

a team

974

00:39:21,130 --> 00:39:19,910

well Ben thanks so much so much for

975

00:39:22,569 --> 00:39:21,140

taking the time to talk to us you'd

976  
00:39:24,280 --> 00:39:22,579  
better go and write your book now yes

977  
00:39:33,259 --> 00:39:24,290  
I'll get right on it thank you I was

978  
00:39:40,079 --> 00:39:36,569  
you're listening to the skeptic zone I'm

979  
00:39:42,390 --> 00:39:40,089  
Brian Dunning from sceptile calm when

980  
00:39:45,299 --> 00:39:42,400  
I'm not tuned into the skeptic zone I'm

981  
00:39:47,130 --> 00:39:45,309  
recording thus kept I'd podcast doing

982  
00:39:48,920 --> 00:39:47,140  
what I can to further knowledge by

983  
00:39:51,450 --> 00:39:48,930  
blasting away the widespread

984  
00:39:54,299 --> 00:39:51,460  
pseudo-sciences that infect popular

985  
00:39:56,339 --> 00:39:54,309  
culture I've also compiled a 40-minute

986  
00:39:59,579 --> 00:39:56,349  
educational video on critical thinking

987  
00:40:03,299 --> 00:39:59,589  
called here be dragons at here be

988  
00:40:06,329 --> 00:40:03,309

dragons movie.com I hope you check those

989

00:40:21,479 --> 00:40:06,339

out and I hope you enjoy the skeptic

990

00:40:23,430 --> 00:40:21,489

zone well I've come here to the

991

00:40:27,229 --> 00:40:23,440

University of Technology here in Sydney

992

00:40:32,549 --> 00:40:27,239

UTS City campus where and stove are

993

00:40:34,469 --> 00:40:32,559

having a well a public day people can

994

00:40:37,319 --> 00:40:34,479

come and ask questions it's called fact

995

00:40:39,479 --> 00:40:37,329

or fiction which is a show goes for an

996

00:40:42,420 --> 00:40:39,489

hour and a half which I hope to to check

997

00:40:45,749 --> 00:40:42,430

out soon lots of people here finding out

998

00:40:48,420 --> 00:40:45,759

about what the what happens at the

999

00:40:49,680 --> 00:40:48,430

reactor at Lucas Heights environmental

1000

00:40:52,410 --> 00:40:49,690

research and all that sort of thing

1001  
00:40:56,549 --> 00:40:52,420  
Australia nuclear science and technology

1002  
00:40:57,989 --> 00:40:56,559  
organisation and stone and I'm really

1003  
00:41:00,630 --> 00:40:57,999  
pleased to see there's a great interest

1004  
00:41:02,789 --> 00:41:00,640  
here I'm milling around the audience and

1005  
00:41:05,519 --> 00:41:02,799  
they've even got somebody dressed up as

1006  
00:41:07,049 --> 00:41:05,529  
Darth Vader but all adds to part of the

1007  
00:41:11,240 --> 00:41:07,059  
fun this is all of course to do with

1008  
00:41:14,630 --> 00:41:13,280  
now we've got an interesting desk and

1009  
00:41:16,040 --> 00:41:14,640  
lots of members of the public lots of

1010  
00:41:18,230 --> 00:41:16,050  
kids lined up and they're wearing lab

1011  
00:41:19,970 --> 00:41:18,240  
coats I'm with Amelia hi Amelia hi hey

1012  
00:41:21,710 --> 00:41:19,980  
going I'm very well I'm having such a

1013  
00:41:24,440 --> 00:41:21,720

good day today what is your position

1014

00:41:26,150 --> 00:41:24,450

with that end state I'm in the graduate

1015

00:41:27,830 --> 00:41:26,160

program I'm currently working a life

1016

00:41:31,310 --> 00:41:27,840

sciences division doing medical research

1017

00:41:33,950 --> 00:41:31,320

into radiation well yeah actually really

1018

00:41:36,380 --> 00:41:33,960

interesting stuff it is it's it's very

1019

00:41:38,060 --> 00:41:36,390

fascinating listen it's certainly a lot

1020

00:41:39,530 --> 00:41:38,070

to do and a lot we don't know and a lot

1021

00:41:40,790 --> 00:41:39,540

to find out about so it's all very

1022

00:41:43,040 --> 00:41:40,800

exciting right now I'm very interested

1023

00:41:45,440 --> 00:41:43,050

to know what what's going on at this

1024

00:41:47,330 --> 00:41:45,450

table is that a real Geiger counter that

1025

00:41:49,130 --> 00:41:47,340

is a real guy get killed that's what one

1026

00:41:51,560 --> 00:41:49,140

looks like just like in the movies yes

1027

00:41:53,600 --> 00:41:51,570

just like in the movies and you can hear

1028

00:41:55,340 --> 00:41:53,610

it's giving up a crackling sound and

1029

00:41:56,870 --> 00:41:55,350

telling us how much better radiations

1030

00:41:59,570 --> 00:41:56,880

given off by different objects

1031

00:42:01,670 --> 00:41:59,580

vita-radiation yes beta radiation it's a

1032

00:42:04,160 --> 00:42:01,680

certain type of radiation and it can be

1033

00:42:05,660 --> 00:42:04,170

stopped by concrete and lead and will

1034

00:42:07,940 --> 00:42:05,670

pass through you but people will give

1035

00:42:09,710 --> 00:42:07,950

off certain amount of radiation based on

1036

00:42:11,570 --> 00:42:09,720

what they've been eating or what they've

1037

00:42:13,610 --> 00:42:11,580

been doing during the day it's all very

1038

00:42:15,440 --> 00:42:13,620

normal to be a little bit radioactive

1039

00:42:16,520 --> 00:42:15,450

that's interesting i can see these kids

1040

00:42:18,770 --> 00:42:16,530

are lined up now and they're all

1041

00:42:20,840 --> 00:42:18,780

pressing their hand against the the

1042

00:42:22,610 --> 00:42:20,850

sensor yes yeah measuring how

1043

00:42:26,090 --> 00:42:22,620

radioactive or what they are as we say

1044

00:42:27,320 --> 00:42:26,100

dancing oh well very surprised usually

1045

00:42:28,970 --> 00:42:27,330

to find that they are a little bit

1046

00:42:31,320 --> 00:42:28,980

radioactive will hop they are you say

1047

00:42:35,300 --> 00:42:31,330

yes yeah

1048

00:42:37,230 --> 00:42:35,310

is this lagan is how are you yeah

1049

00:42:38,520 --> 00:42:37,240

they're having a great oh what's this

1050

00:42:40,950 --> 00:42:38,530

now they're trying it over a cup of

1051  
00:42:45,030 --> 00:42:40,960  
something yes and this contains yeah can

1052  
00:42:49,080 --> 00:42:47,130  
I can hear the crackling isn't that it

1053  
00:42:52,230 --> 00:42:49,090  
does sound like just out of the movies

1054  
00:42:54,030 --> 00:42:52,240  
do yes it certainly does yes so that cup

1055  
00:42:56,460 --> 00:42:54,040  
contains uranium oxide and it gives it a

1056  
00:42:58,810 --> 00:42:56,470  
green color and those sorts of cups were

1057  
00:43:01,480 --> 00:42:58,820  
very popular in the 1920s

1058  
00:43:03,960 --> 00:43:01,490  
so this I'm holding it now this has got

1059  
00:43:06,580 --> 00:43:03,970  
the uranium in it yes uranium oxide

1060  
00:43:10,210 --> 00:43:06,590  
slightly radioactive under this cream

1061  
00:43:13,210 --> 00:43:10,220  
yes yes green and that was used because

1062  
00:43:14,770 --> 00:43:13,220  
it glows a little bit in the dark but

1063  
00:43:16,300 --> 00:43:14,780

it's perfectly sure perfectly safe to

1064

00:43:18,910 --> 00:43:16,310

eat or drink out of people are usually

1065

00:43:21,460 --> 00:43:18,920

surprised by that but I wouldn't

1066

00:43:23,530 --> 00:43:21,470

recommend eating it just but eating out

1067

00:43:26,550 --> 00:43:23,540

of it is fine it's quite good quite

1068

00:43:29,520 --> 00:43:26,560

eerie with this green glow yes it does

1069

00:43:31,650 --> 00:43:29,530

well

1070

00:43:33,030 --> 00:43:31,660

that's fascinating and I was keep

1071

00:43:34,440 --> 00:43:33,040

mentioning the movies and I noticed

1072

00:43:37,320 --> 00:43:34,450

there are lots of movie posters around

1073

00:43:40,050 --> 00:43:37,330

and Darth Vader yes what's the idea of

1074

00:43:42,840 --> 00:43:40,060

alone you know the event today is really

1075

00:43:44,550 --> 00:43:42,850

looking at sci fi movies and whether the

1076

00:43:46,140 --> 00:43:44,560

things you see in sci fi movies can

1077

00:43:48,150 --> 00:43:46,150

actually be done in real life for now of

1078

00:43:50,460 --> 00:43:48,160

course fact or fiction and that's the

1079

00:43:52,740 --> 00:43:50,470

show that we're going to have a look at

1080

00:43:55,440 --> 00:43:52,750

momentarily the crowd are lined up

1081

00:43:57,390 --> 00:43:55,450

already very eager yes very excited I

1082

00:43:58,910 --> 00:43:57,400

will get to have their say and whether

1083

00:44:01,320 --> 00:43:58,920

they think these things are true or not

1084

00:44:03,480 --> 00:44:01,330

how interesting well thank you very much

1085

00:44:06,240 --> 00:44:03,490

for sparing some time what an

1086

00:44:10,050 --> 00:44:06,250

interesting job you have thank you

1087

00:44:11,640 --> 00:44:10,060

you're very welcome well it's really

1088

00:44:13,080 --> 00:44:11,650

interesting here lots of people are

1089

00:44:15,090 --> 00:44:13,090

hovering around waiting for the next

1090

00:44:18,930 --> 00:44:15,100

fact or fiction show to start but I've

1091

00:44:21,780 --> 00:44:18,940

grabbed a Hillary hello I'm fine now you

1092

00:44:23,070 --> 00:44:21,790

work for or with or at nstar that's

1093

00:44:25,440 --> 00:44:23,080

right i'm part of the graduate

1094

00:44:27,780 --> 00:44:25,450

development program and it's for two

1095

00:44:29,580 --> 00:44:27,790

years two years and you're based at

1096

00:44:33,030 --> 00:44:29,590

Lucas house based at Lucas Heights

1097

00:44:36,360 --> 00:44:33,040

sometimes I go on field trips and that

1098

00:44:38,430 --> 00:44:36,370

can go anywhere around the world so part

1099

00:44:40,530 --> 00:44:38,440

of your responsibilities is coming along

1100

00:44:42,570 --> 00:44:40,540

the public events like this yes that's

1101  
00:44:44,520 --> 00:44:42,580  
right to Pope Ramon esta to the public

1102  
00:44:46,800 --> 00:44:44,530  
when you're back to your normal life

1103  
00:44:48,810 --> 00:44:46,810  
working at the erector what is your

1104  
00:44:51,270 --> 00:44:48,820  
normal day-to-day activities there I

1105  
00:44:52,740 --> 00:44:51,280  
work in environmental research and i'm

1106  
00:44:56,070 --> 00:44:52,750  
looking at a low level nuclear waste

1107  
00:44:59,190 --> 00:44:56,080  
site and how contaminants move through

1108  
00:45:00,540 --> 00:44:59,200  
the environment in groundwater yes wow

1109  
00:45:02,450 --> 00:45:00,550  
that's a really interesting job so

1110  
00:45:05,280 --> 00:45:02,460  
you're there for a few years and then

1111  
00:45:07,500 --> 00:45:05,290  
what are your further aspirations what

1112  
00:45:09,660 --> 00:45:07,510  
do you hope to do later on I love

1113  
00:45:11,530 --> 00:45:09,670

travelling so if i can go overseas and

1114

00:45:14,350 --> 00:45:11,540

do a

1115

00:45:16,180 --> 00:45:14,360

work over there perhaps in France or the

1116

00:45:18,610 --> 00:45:16,190

US where they have a lot more reactive

1117

00:45:21,430 --> 00:45:18,620

mobile nuclear waste then they'll be

1118

00:45:23,290 --> 00:45:21,440

there that's very true in fact there

1119

00:45:25,510 --> 00:45:23,300

could be lots of opportunities for

1120

00:45:27,850 --> 00:45:25,520

someone like you over there yes I'm

1121

00:45:29,650 --> 00:45:27,860

hoping so well I'm very pleased that

1122

00:45:31,330 --> 00:45:29,660

you're doing what you're doing and it

1123

00:45:33,850 --> 00:45:31,340

looks like you're having a great great

1124

00:45:35,440 --> 00:45:33,860

day here I'm talking to the public yes

1125

00:45:42,400 --> 00:45:35,450

thanks thanks for having me Thank You

1126

00:45:45,310 --> 00:45:42,410

Eve ladies and gentlemen boys and girls

1127

00:45:55,410 --> 00:45:45,320

please welcome your host for the day the

1128

00:45:55,420 --> 00:45:59,330

nice

1129

00:46:06,300 --> 00:46:03,780

thank you very much let's roll one if

1130

00:46:08,099 --> 00:46:06,310

you're a Time Lord lock your call box or

1131

00:46:11,640 --> 00:46:08,109

someone will break in and Nick your

1132

00:46:16,020 --> 00:46:11,650

scarf welcome everybody thank you for

1133

00:46:18,410 --> 00:46:16,030

coming rookie cyclones Balkans carbon

1134

00:46:22,380 --> 00:46:18,420

based lifeforms silicon-based life-forms

1135

00:46:26,700 --> 00:46:22,390

distinguished guest scientists kids are

1136

00:46:28,340 --> 00:46:26,710

here our mother down darling welcome in

1137

00:46:31,190 --> 00:46:28,350

fact or fiction here at the

1138

00:46:34,920 --> 00:46:31,200

architectural adequate university

1139

00:46:36,330 --> 00:46:34,930

technology and Sydney for fact or

1140

00:46:38,550 --> 00:46:36,340

fiction brought to you by and say my

1141

00:46:42,750 --> 00:46:38,560

name is Peter burner I will be your host

1142

00:46:44,880 --> 00:46:42,760

for this afternoon's proceedings because

1143

00:46:47,630 --> 00:46:44,890

and while we here we here very simply

1144

00:46:51,540 --> 00:46:47,640

because through the course of time the

1145

00:46:54,780 --> 00:46:51,550

lines between fact and fiction have

1146

00:46:56,609 --> 00:46:54,790

become somewhat were here's some

1147

00:47:01,190 --> 00:46:56,619

statistics will set the scene for you

1148

00:47:05,160 --> 00:47:01,200

this afternoon seventy-six percent of

1149

00:47:07,890 --> 00:47:05,170

respondents to our survey wrongly

1150

00:47:11,730 --> 00:47:07,900

believed microscopic life has been shown

1151  
00:47:13,859 --> 00:47:11,740  
to exist on other planets fifty-three

1152  
00:47:16,320 --> 00:47:13,869  
percent wrongly believed hoverboards

1153  
00:47:19,880 --> 00:47:16,330  
like the ones used while art even fly

1154  
00:47:22,250 --> 00:47:19,890  
back to the future actually exist

1155  
00:47:24,720 --> 00:47:22,260  
forty-three percent believe that the

1156  
00:47:28,290 --> 00:47:24,730  
resuscitation of a person from a frozen

1157  
00:47:30,210 --> 00:47:28,300  
state after a long space journey like

1158  
00:47:31,830 --> 00:47:30,220  
we've seen in virtually every single

1159  
00:47:36,000 --> 00:47:31,840  
science fiction moving on demand

1160  
00:47:38,720 --> 00:47:36,010  
actually exist so Hollywood studios are

1161  
00:47:43,109 --> 00:47:38,730  
guilty by a large along with you know

1162  
00:47:45,720 --> 00:47:43,119  
popular media of making the unbelievable

1163  
00:47:47,400 --> 00:47:45,730

believable and the media as I said have

1164

00:47:49,170 --> 00:47:47,410

added to this confusion over the time

1165

00:47:52,890 --> 00:47:49,180

obviously i'm not talking about cosmos

1166

00:47:57,830 --> 00:47:52,900

magazine first boss magazines got out of

1167

00:48:01,780 --> 00:47:57,840

its way to be factually correct and in

1168

00:48:04,630 --> 00:48:01,790

2010 alone the popular media reported

1169

00:48:08,230 --> 00:48:04,640

they had been discovery of alien life

1170

00:48:11,920 --> 00:48:08,240

forms on asteroids that the same type of

1171

00:48:14,050 --> 00:48:11,930

asteroids started life on Earth as well

1172

00:48:18,610 --> 00:48:14,060

as life on Earth ending on the twenty

1173

00:48:22,840 --> 00:48:18,620

first of May of 2011 how many people

1174

00:48:24,550 --> 00:48:22,850

believe that just me come on how many

1175

00:48:28,750 --> 00:48:24,560

people blow out their credit cards that

1176

00:48:31,480 --> 00:48:28,760

you was just made it a little bit of

1177

00:48:32,620 --> 00:48:31,490

paying back to do there well tonight we

1178

00:48:34,990 --> 00:48:32,630

are going to cut through a lot of the

1179

00:48:38,350 --> 00:48:35,000

cosmic haze folks and determine once and

1180

00:48:41,740 --> 00:48:38,360

for all what is science fact and what is

1181

00:48:43,030 --> 00:48:41,750

science fiction but the question we're

1182

00:48:45,460 --> 00:48:43,040

talking about this afternoon is

1183

00:48:47,830 --> 00:48:45,470

invisibility yes we've asked the

1184

00:48:51,220 --> 00:48:47,840

question of our audience let's find out

1185

00:48:53,500 --> 00:48:51,230

what they think they say the majority

1186

00:48:58,540 --> 00:48:53,510

say that invisibility is more fiction

1187

00:49:04,120 --> 00:48:58,550

than fact how close are they well get

1188

00:49:05,770 --> 00:49:04,130

excited because it's actually a fact so

1189

00:49:08,710 --> 00:49:05,780

what oh so what what what are some of

1190

00:49:10,180 --> 00:49:08,720

the real real world applications of

1191

00:49:13,180 --> 00:49:10,190

reversibility where are we seeing well

1192

00:49:16,510 --> 00:49:13,190

as with a lot of fields and science the

1193

00:49:17,830 --> 00:49:16,520

US military is all over it the stealth

1194

00:49:19,960 --> 00:49:17,840

bomber is something you probably heard

1195

00:49:22,480 --> 00:49:19,970

of that's invisible on radar but that

1196

00:49:24,550 --> 00:49:22,490

technology is being expanded and used in

1197

00:49:26,890 --> 00:49:24,560

field devices such as tanks to try and

1198

00:49:29,940 --> 00:49:26,900

make them invisible to the eye what

1199

00:49:32,920 --> 00:49:29,950

about the clothes I was wearing ok well

1200

00:49:35,590 --> 00:49:32,930

it is let's start with the car James

1201  
00:49:38,680 --> 00:49:35,600  
Bond's pretty sweet car that technology

1202  
00:49:40,270 --> 00:49:38,690  
is actually in development scientists in

1203  
00:49:41,740 --> 00:49:40,280  
Japan have developed clothing which

1204  
00:49:44,530 --> 00:49:41,750  
would do a similar things so they use

1205  
00:49:46,150 --> 00:49:44,540  
cameras taking it images of what's going

1206  
00:49:48,220 --> 00:49:46,160  
on behind you and projected onto

1207  
00:49:49,390 --> 00:49:48,230  
clothing in the front of you so that

1208  
00:49:51,220 --> 00:49:49,400  
someone look at you from the front

1209  
00:49:53,740 --> 00:49:51,230  
actually not be able to see very well

1210  
00:49:55,570 --> 00:49:53,750  
now it's not quite as good as you saw in

1211  
00:49:57,070 --> 00:49:55,580  
the movie but it's getting there

1212  
00:49:59,310 --> 00:49:57,080  
something that is a lot cooler it's

1213  
00:50:00,529 --> 00:49:59,320

metamaterials now they're man-made

1214

00:50:03,289 --> 00:50:00,539

materials

1215

00:50:05,599 --> 00:50:03,299

to have properties that you wouldn't

1216

00:50:08,630 --> 00:50:05,609

ordinarily find in nature and in terms

1217

00:50:10,880 --> 00:50:08,640

of invisibility the aim is to develop

1218

00:50:13,699 --> 00:50:10,890

meta materials that can actually divert

1219

00:50:15,679 --> 00:50:13,709

light waves now scientists have actually

1220

00:50:17,269 --> 00:50:15,689

managed to do this using microwaves

1221

00:50:19,130 --> 00:50:17,279

which is similar to like where you just

1222

00:50:20,929 --> 00:50:19,140

can't see them to get a bit of an

1223

00:50:23,089 --> 00:50:20,939

understanding of how this works imagine

1224

00:50:25,489 --> 00:50:23,099

a rock sitting in a creek now as the

1225

00:50:27,739 --> 00:50:25,499

water flows towards the rock it has to

1226  
00:50:29,299 --> 00:50:27,749  
split to divert around the rock and then

1227  
00:50:30,739 --> 00:50:29,309  
rejoins on the other side and if you

1228  
00:50:32,569 --> 00:50:30,749  
were to walk a little way downstream you

1229  
00:50:33,829 --> 00:50:32,579  
have no idea that the rock was even

1230  
00:50:36,919 --> 00:50:33,839  
there by looking at the surface of the

1231  
00:50:40,219 --> 00:50:36,929  
water now because might also travels in

1232  
00:50:41,359 --> 00:50:40,229  
waves we can apply the same concept now

1233  
00:50:43,130 --> 00:50:41,369  
as you're sitting there looking at me

1234  
00:50:45,949 --> 00:50:43,140  
paying attention they'll be an exam

1235  
00:50:47,630 --> 00:50:45,959  
later you're not actually seeing me

1236  
00:50:50,809 --> 00:50:47,640  
you're seeing the reflection of light

1237  
00:50:53,419 --> 00:50:50,819  
coming off me so really all you need to

1238  
00:50:56,299 --> 00:50:53,429

do to make an invisibility cloak is have

1239

00:50:58,699 --> 00:50:56,309

a material that divert light around me

1240

00:51:01,239 --> 00:50:58,709

so nothing reflects off me and you have

1241

00:51:04,219 --> 00:51:01,249

no idea that I'm here now at this stage

1242

00:51:06,380 --> 00:51:04,229

they can do this with microwaves and

1243

00:51:07,969 --> 00:51:06,390

just in recent weeks and months

1244

00:51:10,849 --> 00:51:07,979

scientists have actually managed to

1245

00:51:12,859 --> 00:51:10,859

quote a microscopic object from the

1246

00:51:14,809 --> 00:51:12,869

visible spectrum rounding out the size

1247

00:51:17,169 --> 00:51:14,819

of blood cells so not quite at full

1248

00:51:19,069 --> 00:51:17,179

length invisibility cloak or stage yet

1249

00:51:21,140 --> 00:51:19,079

but hopefully in the not too distant

1250

00:51:23,299 --> 00:51:21,150

future I'll be able to expect that

1251  
00:51:26,299 --> 00:51:23,309  
technology to have an invisible cloak or

1252  
00:51:28,159 --> 00:51:26,309  
an invisible car oh there's no end of it

1253  
00:51:29,959 --> 00:51:28,169  
it's in because our shorts and notebooks

1254  
00:51:35,500 --> 00:51:29,969  
and everything the whole bit thank you

1255  
00:51:40,370 --> 00:51:38,450  
the audience now as you can hear by that

1256  
00:51:42,950 --> 00:51:40,380  
ladies and gentlemen invisibility what a

1257  
00:51:46,130 --> 00:51:42,960  
wonderful concept I wish we could do it

1258  
00:51:48,430 --> 00:51:46,140  
today and I've just found bunny how who

1259  
00:51:52,520 --> 00:51:48,440  
is just talking about that hi body hi

1260  
00:51:56,030 --> 00:51:52,530  
now you work at ANSTO of course what is

1261  
00:51:58,070 --> 00:51:56,040  
your exact role there I'm part of a

1262  
00:52:00,380 --> 00:51:58,080  
graduate program which started in

1263  
00:52:03,620 --> 00:52:00,390

February of this year so it's a two-year

1264

00:52:05,420 --> 00:52:03,630

program just having a bit of a look

1265

00:52:06,740 --> 00:52:05,430

around all the departments at ANSTO so

1266

00:52:08,480 --> 00:52:06,750

I'm currently working in the life

1267

00:52:10,330 --> 00:52:08,490

sciences department which is research

1268

00:52:13,160 --> 00:52:10,340

and development of radio pharmaceuticals

1269

00:52:15,140 --> 00:52:13,170

and i'm doing a four-month rotation in

1270

00:52:16,910 --> 00:52:15,150

our materials sector in a couple of

1271

00:52:18,710 --> 00:52:16,920

months and then finishing off the

1272

00:52:20,630 --> 00:52:18,720

graduate program back in life sciences

1273

00:52:24,260 --> 00:52:20,640

so it's just a learning curve really and

1274

00:52:25,760 --> 00:52:24,270

i bet it is I found your your segment of

1275

00:52:27,560 --> 00:52:25,770

the show which of the fantastic show

1276

00:52:29,120 --> 00:52:27,570

you've just seen the fact or fiction

1277

00:52:30,590 --> 00:52:29,130

where they have lots of movie clips from

1278

00:52:32,540 --> 00:52:30,600

science fiction movies and then

1279

00:52:35,300 --> 00:52:32,550

scientists that come up and talk about

1280

00:52:37,970 --> 00:52:35,310

each one and your topic was invisibility

1281

00:52:39,500 --> 00:52:37,980

and I thought you you sort of got your

1282

00:52:42,770 --> 00:52:39,510

head around that because you're talking

1283

00:52:46,250 --> 00:52:42,780

about the way that the great analogy you

1284

00:52:51,200 --> 00:52:46,260

had was a rock in a stream now the water

1285

00:52:53,870 --> 00:52:51,210

can move around the rock yeah I it is a

1286

00:52:56,360 --> 00:52:53,880

bit of a difficult concept to get your

1287

00:52:57,770 --> 00:52:56,370

head around so I find that being able to

1288

00:52:59,990 --> 00:52:57,780

relate it to something that people have

1289

00:53:02,120 --> 00:53:00,000

seen and can actually imagine in their

1290

00:53:04,010 --> 00:53:02,130

heads in real life yeah kind of makes

1291

00:53:06,020 --> 00:53:04,020

the whole thing make a little bit more

1292

00:53:07,880 --> 00:53:06,030

sense rather than big words like

1293

00:53:10,520 --> 00:53:07,890

metamaterials and you know things that I

1294

00:53:15,140 --> 00:53:10,530

had to look up on Wikipedia so it seems

1295

00:53:17,030 --> 00:53:15,150

to be a lot of that going around and do

1296

00:53:19,070 --> 00:53:17,040

you take part in much of the outreach in

1297

00:53:21,680 --> 00:53:19,080

oh and still do because I bumped in to

1298

00:53:23,390 --> 00:53:21,690

you the other day at the Australian

1299

00:53:26,030 --> 00:53:23,400

Museum where you were there doing some

1300

00:53:27,590 --> 00:53:26,040

outreach to I noticed yeah I think it's

1301  
00:53:30,440 --> 00:53:27,600  
because i'm doing the graduate program

1302  
00:53:31,820 --> 00:53:30,450  
so i'm not all that different in age to

1303  
00:53:33,710 --> 00:53:31,830  
the kids coming out of schools because

1304  
00:53:36,170 --> 00:53:33,720  
i've just finished studying so i think

1305  
00:53:37,580 --> 00:53:36,180  
it's a little bit less intimidating for

1306  
00:53:39,920 --> 00:53:37,590  
kids ok they can come and talk to

1307  
00:53:41,990 --> 00:53:39,930  
someone who's in the generation i

1308  
00:53:43,640 --> 00:53:42,000  
suppose i'll release years yeah someone

1309  
00:53:45,020 --> 00:53:43,650  
they can relate to and someone who's

1310  
00:53:45,329 --> 00:53:45,030  
just gone through that big learning

1311  
00:53:46,829 --> 00:53:45,339  
curve

1312  
00:53:48,569 --> 00:53:46,839  
can still relate it back to the time

1313  
00:53:50,700 --> 00:53:48,579

when they didn't quite understand what

1314

00:53:52,499 --> 00:53:50,710

was going on either so you would have

1315

00:53:55,049 --> 00:53:52,509

been in high school not that many years

1316

00:53:57,569 --> 00:53:55,059

ago image that many is getting out of it

1317

00:54:00,450 --> 00:53:57,579

now but now I can still remember oh we

1318

00:54:02,519 --> 00:54:00,460

can all remember those days and your

1319

00:54:04,289 --> 00:54:02,529

day-to-day activities when you go down

1320

00:54:07,109 --> 00:54:04,299

in you you clock in and you're going to

1321

00:54:08,940 --> 00:54:07,119

work they I guess there could be many

1322

00:54:11,039 --> 00:54:08,950

different things you'd be doing through

1323

00:54:12,989 --> 00:54:11,049

the course of your time there yeah

1324

00:54:15,509 --> 00:54:12,999

that's sort of what I like about my job

1325

00:54:17,450 --> 00:54:15,519

at the moment it's really limited by my

1326  
00:54:20,309 --> 00:54:17,460  
imagination a lot of the time so

1327  
00:54:21,930 --> 00:54:20,319  
scientists come to me with problems and

1328  
00:54:25,019 --> 00:54:21,940  
because I'm the engineer I'm sort of

1329  
00:54:28,019 --> 00:54:25,029  
expected to be able to use technology to

1330  
00:54:30,239 --> 00:54:28,029  
solve them so implementing hardware and

1331  
00:54:32,279 --> 00:54:30,249  
software making machines to be able to

1332  
00:54:35,160 --> 00:54:32,289  
solve a problem that scientists might

1333  
00:54:37,170 --> 00:54:35,170  
have so at the moment that's building

1334  
00:54:39,299 --> 00:54:37,180  
devices to try and separate scientists

1335  
00:54:42,930 --> 00:54:39,309  
from the radiation to stop the negative

1336  
00:54:44,969 --> 00:54:42,940  
effects shields seriously it is it's a

1337  
00:54:46,799 --> 00:54:44,979  
it's coming back to Star Trek already

1338  
00:54:49,170 --> 00:54:46,809

and all the science fiction movies we've

1339

00:54:51,569 --> 00:54:49,180

just seen you're the sort of woman who

1340

00:54:54,479 --> 00:54:51,579

in the future will say ah this is called

1341

00:54:57,450 --> 00:54:54,489

the house shield named after Bonnie how

1342

00:55:00,509 --> 00:54:57,460

who invented the the great she'll dig

1343

00:55:02,009 --> 00:55:00,519

starships that's right Bonnie I'm so

1344

00:55:03,420 --> 00:55:02,019

pleased that you're involved in this

1345

00:55:05,309 --> 00:55:03,430

sort of work and I'm delighted to see

1346

00:55:07,620 --> 00:55:05,319

that people like you are out there we're

1347

00:55:09,630 --> 00:55:07,630

doing the outreach and reaching the

1348

00:55:14,279 --> 00:55:09,640

general public so they can find out more

1349

00:55:15,900 --> 00:55:14,289

thank you thank you very much and to

1350

00:55:18,390 --> 00:55:15,910

wrap up the series of interviews we've

1351

00:55:21,180 --> 00:55:18,400

done here at the fact or fiction and I

1352

00:55:23,370 --> 00:55:21,190

must tell you that during the course of

1353

00:55:25,410 --> 00:55:23,380

the the presentation were all pressing

1354

00:55:26,999 --> 00:55:25,420

these little buttons as when the answers

1355

00:55:29,279 --> 00:55:27,009

came up and if what we thought the right

1356

00:55:31,349 --> 00:55:29,289

answer wasn't at the end I was very

1357

00:55:33,690 --> 00:55:31,359

surprised to see my number come up as

1358

00:55:35,099 --> 00:55:33,700

the senior scientist and I'm quite

1359

00:55:37,259 --> 00:55:35,109

pleased now to be talking to rod dollar

1360

00:55:39,450 --> 00:55:37,269

who's who looks to me to be tired but

1361

00:55:41,670 --> 00:55:39,460

excited I think you know definitely our

1362

00:55:44,640 --> 00:55:41,680

man we've just had a wonderful day of

1363

00:55:46,979 --> 00:55:44,650

fact or fiction now we've had lots of

1364

00:55:49,349 --> 00:55:46,989

people here lots of kids since I think

1365

00:55:51,690 --> 00:55:49,359

that so we've thoroughly entertained

1366

00:55:54,710 --> 00:55:51,700

them I was shown that you know science

1367

00:55:57,140 --> 00:55:54,720

can be a very entertaining experience

1368

00:56:00,260 --> 00:55:57,150

so by I guess combining elements of

1369

00:56:01,880 --> 00:56:00,270

Hollywood with your pure science that

1370

00:56:04,790 --> 00:56:01,890

people can see wow this is really

1371

00:56:06,740 --> 00:56:04,800

interesting stuff and whose idea was

1372

00:56:08,510 --> 00:56:06,750

this whole approach to use these

1373

00:56:11,599 --> 00:56:08,520

Hollywood clips from science fiction oh

1374

00:56:13,130 --> 00:56:11,609

I guess Richard for my sins I have a

1375

00:56:15,470 --> 00:56:13,140

marketing background and I started

1376  
00:56:17,810 --> 00:56:15,480  
against a 12 months ago and so the first

1377  
00:56:20,089 --> 00:56:17,820  
things I noticed was that answer wasn't

1378  
00:56:22,250 --> 00:56:20,099  
participating in National Science Week

1379  
00:56:25,609 --> 00:56:22,260  
like a scientific organisation of the

1380  
00:56:27,890 --> 00:56:25,619  
size should yeah so I applied for some

1381  
00:56:29,839 --> 00:56:27,900  
funding and was successful and one thing

1382  
00:56:30,830 --> 00:56:29,849  
led to the other I guess once once you

1383  
00:56:35,120 --> 00:56:30,840  
get the money you've got to come up with

1384  
00:56:38,330 --> 00:56:35,130  
a concept so you know I very much my

1385  
00:56:40,640 --> 00:56:38,340  
idea and I think that one of my

1386  
00:56:43,099 --> 00:56:40,650  
observations about science in my very

1387  
00:56:45,320 --> 00:56:43,109  
short time in the industry is that we

1388  
00:56:47,690 --> 00:56:45,330

can certainly communicate our science

1389

00:56:49,430 --> 00:56:47,700

matters better than what we currently do

1390

00:56:51,230 --> 00:56:49,440

well it wasn't a loaded question I'd

1391

00:56:52,730 --> 00:56:51,240

actually didn't know that you came up

1392

00:56:55,280 --> 00:56:52,740

with this but I was about to say to you

1393

00:56:57,620 --> 00:56:55,290

I thought it was a very good wait for

1394

00:56:59,089 --> 00:56:57,630

outreach hmm and I think judging by the

1395

00:57:01,700 --> 00:56:59,099

size of the audience there and the

1396

00:57:03,530 --> 00:57:01,710

number of kids and the fun everybody had

1397

00:57:05,660 --> 00:57:03,540

I thought I thought you were right on

1398

00:57:07,790 --> 00:57:05,670

the money yeah I guess you know we've

1399

00:57:10,760 --> 00:57:07,800

got all the elements so with this show

1400

00:57:13,160 --> 00:57:10,770

we are entertaining we are funny so

1401  
00:57:15,140 --> 00:57:13,170  
having a host like Peter Byrne of the

1402  
00:57:16,760 --> 00:57:15,150  
comedian yet make sure that there's

1403  
00:57:19,400 --> 00:57:16,770  
plenty of laughs within the show and

1404  
00:57:22,040 --> 00:57:19,410  
there's a very strong interactive

1405  
00:57:25,579 --> 00:57:22,050  
element as well too so pressing your

1406  
00:57:27,230 --> 00:57:25,589  
keypad hello controllers voting on

1407  
00:57:29,120 --> 00:57:27,240  
whether other technology you've just

1408  
00:57:31,849 --> 00:57:29,130  
watched in the film whether that's fact

1409  
00:57:35,540 --> 00:57:31,859  
or fictional degrees of fact or fiction

1410  
00:57:38,150 --> 00:57:35,550  
um no was challenging for people and so

1411  
00:57:39,470 --> 00:57:38,160  
I think that when you you could tell

1412  
00:57:41,030 --> 00:57:39,480  
when the audience was getting it right

1413  
00:57:42,829 --> 00:57:41,040

there was cheese going up so then

1414

00:57:44,630 --> 00:57:42,839

dividing people in the teams and all the

1415

00:57:46,010 --> 00:57:44,640

rest of it say yeah generally speaking I

1416

00:57:47,810 --> 00:57:46,020

think the whole concept worked very well

1417

00:57:50,240 --> 00:57:47,820

it's great to see lots of people lining

1418

00:57:53,150 --> 00:57:50,250

up as they were earlier just to have a

1419

00:57:54,960 --> 00:57:53,160

look at the Geiger counter and the the

1420

00:57:57,570 --> 00:57:54,970

little Bowl which had rain

1421

00:57:59,610 --> 00:57:57,580

yeah like s that's part of our day to

1422

00:58:01,980 --> 00:57:59,620

day you have fact or fiction a dance so

1423

00:58:04,590 --> 00:58:01,990

that's it's an organization that has a

1424

00:58:07,740 --> 00:58:04,600

lot of misperceptions and so fact that

1425

00:58:09,480 --> 00:58:07,750

radioactivity is always harmful and

1426

00:58:12,330 --> 00:58:09,490

dangerous i mean we want to improve that

1427

00:58:15,420 --> 00:58:12,340

is fiction that we use radio activities

1428

00:58:18,900 --> 00:58:15,430

for research and for nuclear medicines

1429

00:58:21,570 --> 00:58:18,910

and some for study of the environment

1430

00:58:24,150 --> 00:58:21,580

and several other purposes some and so

1431

00:58:26,370 --> 00:58:24,160

it's small amounts of radioactivity that

1432

00:58:28,620 --> 00:58:26,380

we're producing as well too so lots of

1433

00:58:30,330 --> 00:58:28,630

benefits we can't escape them well well

1434

00:58:33,300 --> 00:58:30,340

as part of their everyday I mean it's

1435

00:58:35,550 --> 00:58:33,310

it's part of the natural world but most

1436

00:58:37,230 --> 00:58:35,560

people like believe it or not fact or

1437

00:58:40,770 --> 00:58:37,240

fiction they think that's are you though

1438

00:58:43,140 --> 00:58:40,780

that when you say radiation is lower a

1439

00:58:45,870 --> 00:58:43,150

dance so within our reactor than what it

1440

00:58:48,510 --> 00:58:45,880

is if you're standing outside receiving

1441

00:58:50,520 --> 00:58:48,520

a nice tan from the Sun when you tell

1442

00:58:51,870 --> 00:58:50,530

them that that's a fax you know some

1443

00:58:54,210 --> 00:58:51,880

people still think that that's fiction

1444

00:58:55,560 --> 00:58:54,220

I'm sure they do now if our listeners

1445

00:58:57,120 --> 00:58:55,570

want to find out more about the work

1446

00:58:58,980 --> 00:58:57,130

that you're undertaking there and am

1447

00:59:00,510 --> 00:58:58,990

still in general when they what the

1448

00:59:02,820 --> 00:59:00,520

website can they all go along to the

1449

00:59:07,770 --> 00:59:02,830

answer website which is world wide web

1450

00:59:10,470 --> 00:59:07,780

bot and so a in STO gov au and so we do

1451

00:59:13,320 --> 00:59:10,480

community to us they're available like

1452

00:59:16,110 --> 00:59:13,330

every second Saturday or you can bring a

1453

00:59:19,410 --> 00:59:16,120

group along as well too and come during

1454

00:59:21,930 --> 00:59:19,420

the week we also do I quite an extensive

1455

00:59:23,640 --> 00:59:21,940

school holiday program as well too so we

1456

00:59:25,980 --> 00:59:23,650

do to as morning and afternoon every day

1457

00:59:28,110 --> 00:59:25,990

during the school holidays and some it's

1458

00:59:30,180 --> 00:59:28,120

an eye-opening experience it's a large

1459

00:59:34,680 --> 00:59:30,190

organization there's a lot of research

1460

00:59:36,810 --> 00:59:34,690

and again we try to make our tour as

1461

00:59:38,730 --> 00:59:36,820

entertaining as possible and so bring it

1462

00:59:40,680 --> 00:59:38,740

down to a level that people can

1463

00:59:42,660 --> 00:59:40,690

understand it sounds like the sort of

1464

00:59:44,580 --> 00:59:42,670

thing I should get myself down there to

1465

00:59:47,370 --> 00:59:44,590

leukocytes check it out which I will be

1466

00:59:49,410 --> 00:59:47,380

doing at sooner rather than later well

1467

01:00:04,470 --> 00:59:49,420

rock thank you very much for emotion

1468

01:00:07,620 --> 01:00:04,480

nature thank you Richard scopes monkey

1469

01:00:10,079 --> 01:00:07,630

blair scopes monkey choir wait are we

1470

01:00:12,720 --> 01:00:10,089

acquire know when I require but we are

1471

01:00:17,010 --> 01:00:12,730

musicians when I monkeys either we are

1472

01:00:20,160 --> 01:00:17,020

primates so what is scopes monkey choir

1473

01:00:23,039 --> 01:00:20,170

it's podcast oh yeah it's podcast it's

1474

01:00:25,049 --> 01:00:23,049

the podcast where music and sound meets

1475

01:00:27,120 --> 01:00:25,059

science and skepticism we are two

1476  
01:00:28,890 --> 01:00:27,130  
professional musicians who decided turn

1477  
01:00:30,870 --> 01:00:28,900  
are skeptical eyes on our own profession

1478  
01:00:33,420 --> 01:00:30,880  
we look at the science of music we look

1479  
01:00:35,880 --> 01:00:33,430  
at studies recent studies about music

1480  
01:00:40,950 --> 01:00:35,890  
and sound we look skeptically at musical

1481  
01:00:42,690 --> 01:00:40,960  
myths we look at and we work out of our

1482  
01:00:45,809 --> 01:00:42,700  
music listen to us at Scopes Monkey

1483  
01:00:47,819 --> 01:00:45,819  
choir calm I'll find us on iTunes Scopes

1484  
01:01:02,599 --> 01:00:47,829  
Monkey choir the podcast for music and

1485  
01:01:07,160 --> 01:01:04,759  
thank you for listening to the skeptic

1486  
01:01:08,779 --> 01:01:07,170  
zone and while you're being listening to

1487  
01:01:11,210 --> 01:01:08,789  
the skeptics earning I've been working

1488  
01:01:14,569 --> 01:01:11,220

on it at the same time go figure that

1489

01:01:17,059 --> 01:01:14,579

one out my farrier has arrived at Manly

1490

01:01:19,729 --> 01:01:17,069

Beach beautiful manly beach and I'm

1491

01:01:21,440 --> 01:01:19,739

walking on the sand right now heading

1492

01:01:23,900 --> 01:01:21,450

down towards the water not too many

1493

01:01:27,339 --> 01:01:23,910

swimmers still wind here in Australia

1494

01:01:31,099 --> 01:01:27,349

but lots of surfboard riders out there

1495

01:01:33,430 --> 01:01:31,109

as I look out on the beautiful South

1496

01:01:44,970 --> 01:01:33,440

Pacific

1497

01:01:52,680 --> 01:01:48,900

coming up on next week's show that's a

1498

01:01:57,480 --> 01:01:52,690

good question hmm probably probably more

1499

01:02:00,210 --> 01:01:57,490

from Tam in Las Vegas baby probably

1500

01:02:03,540 --> 01:02:00,220

something else and we'll have even

1501

01:02:05,700 --> 01:02:03,550

something else other than that I suspect

1502

01:02:07,800 --> 01:02:05,710

something to do with me not something to

1503

01:02:11,500 --> 01:02:07,810

a doctor AG something to do with their

1504

01:02:17,470 --> 01:02:11,510

answer give where you have the story

1505

01:02:20,650 --> 01:02:17,480

so from a sandy beautiful manly beach

1506

01:02:23,290 --> 01:02:20,660

full of seagulls and we'll gathered

1507

01:02:25,780 --> 01:02:23,300

around this is Richard Saunders signing

1508

01:02:35,069 --> 01:02:25,790

up from manly beach here in Sydney

1509

01:02:42,489 --> 01:02:37,479

you've been listening to the skeptic

1510

01:02:46,239 --> 01:02:42,499

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