

1
00:00:06,559 --> 00:00:14,109
welcome to the skeptic zone the podcast

2
00:00:09,529 --> 00:00:14,109
from Australia for science and reason

3
00:00:20,460 --> 00:00:26,609
hello and welcome to the skeptic zone

4
00:00:23,099 --> 00:00:29,250
episode number 81 for the seventh of may

5
00:00:26,609 --> 00:00:33,870
2010 Richard Saunders here with you once

6
00:00:29,250 --> 00:00:35,730
again and today show well dr. Rachel and

7
00:00:33,869 --> 00:00:38,759
I went along to a very interesting

8
00:00:35,729 --> 00:00:43,140
initiative here in Sydney art think and

9
00:00:38,759 --> 00:00:45,719
play mrs. by the culture at work culture

10
00:00:43,140 --> 00:00:49,500
at work interesting interplay with

11
00:00:45,719 --> 00:00:51,899
science and art and we popped long the

12
00:00:49,500 --> 00:00:55,350
other night and we had a talk by Adam

13
00:00:51,899 --> 00:00:58,379
Hamlin about his research into neurons

14
00:00:55,350 --> 00:01:01,739
and lots of interesting pictures

15
00:00:58,378 --> 00:01:06,299
followed by a talk by melody Lord about

16
00:01:01,738 --> 00:01:09,209
her embroidery based on pictures of

17
00:01:06,299 --> 00:01:11,879
neurons from the brain and then we saw

18
00:01:09,209 --> 00:01:14,728
her embroidery that's coming up we have

19
00:01:11,879 --> 00:01:17,789
a little bit of the talk followed by an

20
00:01:14,728 --> 00:01:20,819
interview with Adam and melody after

21
00:01:17,789 --> 00:01:22,618
that the think tank very funny thing

22
00:01:20,819 --> 00:01:25,530
tank this week I think with a very

23
00:01:22,618 --> 00:01:27,750
special bus announcement now a fewer

24
00:01:25,530 --> 00:01:29,399
little notes before we get started thank

25
00:01:27,750 --> 00:01:33,118
you for everybody who turned up to

26
00:01:29,399 --> 00:01:35,759
Sydney skeptics in the pub elder in the

27
00:01:33,118 --> 00:01:38,218
last week what a wonderfully big turnout

28
00:01:35,759 --> 00:01:40,920
it was and thanks may not for coming

29

00:01:38,218 --> 00:01:44,039
along to Australian skeptics are working

30
00:01:40,920 --> 00:01:46,140
hard on the details of Tam Australia

31
00:01:44,040 --> 00:01:48,899
don't forget that coming up at the end

32
00:01:46,140 --> 00:01:50,189
of the year more announcements on that I

33
00:01:48,899 --> 00:01:52,159
think we might even have some

34
00:01:50,188 --> 00:01:54,599
announcements during the think tank of

35
00:01:52,159 --> 00:01:57,149
course members of Australian skeptics

36
00:01:54,599 --> 00:02:01,280
and the skeptics own podcast will be

37
00:01:57,149 --> 00:02:05,099
winging over to Las Vegas to join tam

38
00:02:01,280 --> 00:02:07,439
Vegas with James Randi and all our

39
00:02:05,099 --> 00:02:09,508
friends if you're going to the amazing

40
00:02:07,438 --> 00:02:11,759
meeting this year in Las Vegas make sure

41
00:02:09,508 --> 00:02:14,279
you are come over and say hello and

42
00:02:11,759 --> 00:02:16,379
don't forget to check out the podcast

43
00:02:14,280 --> 00:02:19,739

from our very own Kyle Easter just the

44

00:02:16,379 --> 00:02:24,060
token skeptic you can find that at token

45

00:02:19,739 --> 00:02:26,579
skeptic dot org I don't know when Kylie

46

00:02:24,060 --> 00:02:28,799
sleeps I I honestly no not only is she a

47

00:02:26,579 --> 00:02:32,400
reporter for the skeptic zone that she

48

00:02:28,799 --> 00:02:35,010
has a very own podcast the token skeptic

49

00:02:32,400 --> 00:02:37,530
and look out for dr. ray cheese blog the

50

00:02:35,009 --> 00:02:40,679
skeptics book of poo poo and Kylie

51

00:02:37,530 --> 00:02:43,890
Sturgis blog pod black now you can find

52

00:02:40,680 --> 00:02:47,069
those simply by going to skeptics own TV

53

00:02:43,889 --> 00:02:49,348
and you'll see the links there an

54

00:02:47,068 --> 00:02:52,938
entertaining skipped exam for you this

55

00:02:49,348 --> 00:02:52,938
week so let's get into it

56

00:03:04,348 --> 00:03:09,218
we take you now to piermont here

57

00:03:06,789 --> 00:03:13,449
instantly for an initiative from culture

58
00:03:09,218 --> 00:03:15,098
at work art think and play a brief

59
00:03:13,449 --> 00:03:17,889
excerpt from the talk given to us by

60
00:03:15,098 --> 00:03:21,128
Adam Hamlin about his research into

61
00:03:17,889 --> 00:03:22,899
brain cells followed by a brief excerpt

62
00:03:21,128 --> 00:03:26,169
from the talk given to us by artist

63
00:03:22,900 --> 00:03:28,299
melody Lord and after that an interview

64
00:03:26,169 --> 00:03:34,479
with both of them with dr. ohe and

65
00:03:28,299 --> 00:03:37,299
myself further Iran's places we call

66
00:03:34,479 --> 00:03:38,918
your Genesis this is a great scientific

67
00:03:37,299 --> 00:03:41,139
story it's one of those stories where

68
00:03:38,919 --> 00:03:43,090
there was a long-held belief about how

69
00:03:41,139 --> 00:03:46,030
the brain boyfriend all the Sun was this

70
00:03:43,090 --> 00:03:48,639
date we had to change it like so this is

71
00:03:46,030 --> 00:03:49,959
she died with the okay so for a long

72
00:03:48,639 --> 00:03:52,359
time we thought the number of brain

73
00:03:49,959 --> 00:03:53,408
cells you were born with MZ may die

74
00:03:52,359 --> 00:03:56,530
throughout life and they were never

75
00:03:53,408 --> 00:03:59,378
regenerated and this is a picture I took

76
00:03:56,530 --> 00:04:01,389
of Iran's you know part of the brain

77
00:03:59,378 --> 00:04:03,728
called the hippocampus specifically the

78
00:04:01,389 --> 00:04:05,290
dentate gyrus meeting the truth and

79
00:04:03,729 --> 00:04:07,569
these are cells for two weeks old that

80
00:04:05,289 --> 00:04:09,698
have been born with integrated into the

81
00:04:07,568 --> 00:04:11,228
nervous system this is an early the

82
00:04:09,699 --> 00:04:14,680
privates involved in learning and memory

83
00:04:11,229 --> 00:04:16,780
function so like I said for a long time

84
00:04:14,680 --> 00:04:20,288
we didn't even think the neurogenesis

85
00:04:16,779 --> 00:04:23,408
happen in the brain 3983 it was first

86

00:04:20,288 --> 00:04:25,300
found in the bedroom so that all the

87
00:04:23,408 --> 00:04:27,319
Rockies in common of calling someone a

88
00:04:25,300 --> 00:04:29,780
bird brain I was ability like

89
00:04:27,319 --> 00:04:32,029
here in blue is all the neurons in the

90
00:04:29,779 --> 00:04:33,649
brain even read those shown here your

91
00:04:32,029 --> 00:04:36,859
arms that have been born in the bird

92
00:04:33,649 --> 00:04:39,049
brain so this is United 93 and by the

93
00:04:36,860 --> 00:04:41,480
early nineties your Genesis have been

94
00:04:39,050 --> 00:04:44,840
discovered in pretty much mammal species

95
00:04:41,480 --> 00:04:46,550
including the human brain so it doesn't

96
00:04:44,839 --> 00:04:49,399
happen everywhere in the ebit reacting

97
00:04:46,550 --> 00:04:51,110
to specific areas so bundled is called

98
00:04:49,399 --> 00:04:53,269
the subventricular zone around the

99
00:04:51,110 --> 00:04:56,030
ventricles the new year under born here

100
00:04:53,269 --> 00:04:59,419

my birth down and out into your factory

101

00:04:56,029 --> 00:05:01,250

bulbs so a sense of smell and stuff is

102

00:04:59,420 --> 00:05:03,530

always be neurons before mystic cells

103

00:05:01,250 --> 00:05:05,720

get exposed to the environment a

104

00:05:03,529 --> 00:05:07,729

lightweight two chemicals that are

105

00:05:05,720 --> 00:05:09,890

always getting turnovers relieve your

106

00:05:07,730 --> 00:05:12,290

arms coming into the or thank you got to

107

00:05:09,889 --> 00:05:14,719

keep our sensor so early there's also a

108

00:05:12,290 --> 00:05:16,720

secondary hook at the campus so this is

109

00:05:14,720 --> 00:05:18,950

what the original photo was taken off

110

00:05:16,720 --> 00:05:20,690

studies in your auntie morning of the

111

00:05:18,949 --> 00:05:23,180

campus this is an area that involved in

112

00:05:20,689 --> 00:05:25,129

learning and memory function so just

113

00:05:23,180 --> 00:05:28,670

quickly how this process happens we have

114

00:05:25,129 --> 00:05:30,920

a hold with stem cells hanging around in

115
00:05:28,670 --> 00:05:33,410
the subventricular zone and in the other

116
00:05:30,920 --> 00:05:35,509
campus hello that much the time that the

117
00:05:33,410 --> 00:05:38,920
state's themselves but occasionally they

118
00:05:35,509 --> 00:05:41,569
get all these new precursor cells and

119
00:05:38,920 --> 00:05:44,060
what happens is about half of each user

120
00:05:41,569 --> 00:05:49,490
guide and over half of them can go on to

121
00:05:44,060 --> 00:05:52,310
form new neural cells of which is a lot

122
00:05:49,490 --> 00:05:52,980
of types they can become support cells a

123
00:05:52,310 --> 00:05:55,350
disaster

124
00:05:52,980 --> 00:05:58,050
we go down the sides astrocytes are

125
00:05:55,350 --> 00:05:59,520
involved in transferring images from the

126
00:05:58,050 --> 00:06:01,139
blood the neurons because the neurons

127
00:05:59,519 --> 00:06:03,810
have actually come into contact with the

128
00:06:01,139 --> 00:06:05,789
blood where is the oligodendrocytes I

129
00:06:03,810 --> 00:06:07,879
know these form an insulation wire

130
00:06:05,790 --> 00:06:10,710
around yours to help fast transmission

131
00:06:07,879 --> 00:06:14,339
and as percentage of them can also

132
00:06:10,709 --> 00:06:16,969
become neurons so in the lab this is the

133
00:06:14,339 --> 00:06:19,669
process we use to study euro Genesis

134
00:06:16,970 --> 00:06:22,760
usually harvest shelves from the

135
00:06:19,670 --> 00:06:24,780
hippocampus usually from a mouse

136
00:06:22,759 --> 00:06:27,509
differentiated cells we grow them up in

137
00:06:24,779 --> 00:06:30,419
a culture dish and the way we can we can

138
00:06:27,509 --> 00:06:31,560
say the process of what happens and what

139
00:06:30,420 --> 00:06:34,110
sort of things can we do to try and

140
00:06:31,560 --> 00:06:36,540
stimulate neurogenesis areas of Brian

141
00:06:34,110 --> 00:06:39,480
and a few things we found is that any

142
00:06:36,540 --> 00:06:42,600
present status some hormones can

143

00:06:39,480 --> 00:06:45,300
stimulate neurogenesis as well after

144
00:06:42,600 --> 00:06:47,100
ischemia is after a brain trauma such as

145
00:06:45,300 --> 00:06:49,500
a stroke can also give an upregulation

146
00:06:47,100 --> 00:06:54,530
of your chances potentially is a way of

147
00:06:49,500 --> 00:06:56,699
I'm trying to make itself also following

148
00:06:54,529 --> 00:06:59,009
voluntary exercise which is really

149
00:06:56,699 --> 00:07:01,199
important if you force do the exercise

150
00:06:59,009 --> 00:07:04,129
of danger than your team hasn't been a

151
00:07:01,199 --> 00:07:04,129
bottom reaction

152
00:07:09,379 --> 00:07:15,300
one of the things I love about linking

153
00:07:12,000 --> 00:07:19,079
of textiles that you have such wonderful

154
00:07:15,300 --> 00:07:21,750
choice of tactile and visually beautiful

155
00:07:19,079 --> 00:07:25,318
materials to express what we're trying

156
00:07:21,750 --> 00:07:29,430
to say and I just love that which I

157
00:07:25,319 --> 00:07:30,930

wanted to seek them like some of the

158

00:07:29,430 --> 00:07:34,490

thread ladies were hand dyed silk

159

00:07:30,930 --> 00:07:37,709

threads which have gave a more organic

160

00:07:34,490 --> 00:07:40,288

quality to the color and sometimes they

161

00:07:37,709 --> 00:07:42,299

were just ordinary embroidery cotton

162

00:07:40,288 --> 00:07:45,568

like those funds which gave a bit more

163

00:07:42,300 --> 00:07:48,930

vibrant time and the thing that I found

164

00:07:45,569 --> 00:07:53,189

you doing the works is that the works

165

00:07:48,930 --> 00:07:55,079

developed differently you have to think

166

00:07:53,189 --> 00:07:57,810

about what you want to achieve when you

167

00:07:55,079 --> 00:08:01,459

start choosing materials plan out your

168

00:07:57,810 --> 00:08:04,348

process but other goes along the

169

00:08:01,459 --> 00:08:07,799

materials teach you different things

170

00:08:04,348 --> 00:08:10,110

about what you want to to do next or

171

00:08:07,800 --> 00:08:12,930

where the work is going often you end up

172
00:08:10,110 --> 00:08:14,050
a completely different result in a bit

173
00:08:12,930 --> 00:08:19,959
then you really thought

174
00:08:14,050 --> 00:08:26,889
to get them started this is bit more the

175
00:08:19,959 --> 00:08:29,378
particle this work was done with French

176
00:08:26,889 --> 00:08:32,229
knots and little bits of Panem satin

177
00:08:29,379 --> 00:08:34,719
stitch and it represents 40 hours of

178
00:08:32,229 --> 00:08:38,200
stitching I know some people will ask

179
00:08:34,719 --> 00:08:41,528
that i found it a very romantic practice

180
00:08:38,200 --> 00:08:44,560
to sit and french not a french not a

181
00:08:41,528 --> 00:08:48,278
french lot to choose the next color to

182
00:08:44,559 --> 00:08:49,958
work with to fill the space which I did

183
00:08:48,278 --> 00:08:55,088
all visually by checking back against

184
00:08:49,958 --> 00:08:57,489
the original picture and I thought a lot

185
00:08:55,089 --> 00:08:59,350
about what we know about the brain and

186
00:08:57,490 --> 00:09:00,879
what we don't know about the brain which

187
00:08:59,350 --> 00:09:04,980
in my case is a lot less than what

188
00:09:00,879 --> 00:09:08,320
elements that I think that any art form

189
00:09:04,980 --> 00:09:13,450
whether it's smart metal on paper music

190
00:09:08,320 --> 00:09:15,550
dance modern media or embroidery is a

191
00:09:13,450 --> 00:09:18,820
way of expressing knowledge and search

192
00:09:15,549 --> 00:09:21,659
for knowledge and that's how I feel that

193
00:09:18,820 --> 00:09:21,660
I was doing

194
00:09:24,828 --> 00:09:29,849
well we're here in Sydney in piermont

195
00:09:27,448 --> 00:09:33,539
and the exhibition is called kingdom of

196
00:09:29,850 --> 00:09:35,550
the blind it's a culture at work project

197
00:09:33,539 --> 00:09:39,269
which is a wonderful idea of combining

198
00:09:35,549 --> 00:09:40,859
science with art dr. AG it is and I'm

199
00:09:39,269 --> 00:09:43,259
we're with our very special guests

200

00:09:40,860 --> 00:09:45,539
melody Lord hello melody hello and

201
00:09:43,259 --> 00:09:47,550
melody is the artist here tonight who

202
00:09:45,539 --> 00:09:50,338
has done all the embroidery which was

203
00:09:47,549 --> 00:09:52,979
based on dr. Adam Hamlin's wonderful

204
00:09:50,339 --> 00:09:55,889
neuroscience pictures hi Adam I write to

205
00:09:52,980 --> 00:09:58,560
you again good to see you again don't in

206
00:09:55,889 --> 00:10:00,778
Sydney this far yeah so can you guys

207
00:09:58,559 --> 00:10:03,479
tell us a little bit about how this came

208
00:10:00,778 --> 00:10:05,399
to be how is it that a scientist and an

209
00:10:03,480 --> 00:10:08,699
artist are working together on such a

210
00:10:05,399 --> 00:10:11,730
great project culture at work is all

211
00:10:08,698 --> 00:10:15,000
about improving science education using

212
00:10:11,730 --> 00:10:18,300
art and creativity to encourage kids and

213
00:10:15,000 --> 00:10:22,470
adults to engage with the science so

214
00:10:18,299 --> 00:10:24,958

that's how it combines that if you if

215

00:10:22,470 --> 00:10:27,000

you think through the science while

216

00:10:24,958 --> 00:10:31,500

you're engaging the creative part of

217

00:10:27,000 --> 00:10:36,899

your brain it tends to go in better that

218

00:10:31,500 --> 00:10:38,549

that's the later now Adam it went in

219

00:10:36,899 --> 00:10:40,649

better for me tonight I think it was a

220

00:10:38,549 --> 00:10:42,269

wonderful presentation that I think

221

00:10:40,649 --> 00:10:45,000

substrate what I try to do with my

222

00:10:42,269 --> 00:10:47,789

presentation tonight was really show how

223

00:10:45,000 --> 00:10:49,980

science and art can be a really similar

224

00:10:47,789 --> 00:10:51,568

process remember trying to gather data

225

00:10:49,980 --> 00:10:53,370

in neuroscience when we take these

226

00:10:51,568 --> 00:10:56,338

beautiful images what we're mostly

227

00:10:53,370 --> 00:10:59,100

trying to do is gather data but a really

228

00:10:56,339 --> 00:11:00,930

good product of that is the making of

229

00:10:59,100 --> 00:11:02,300

these beautiful images that's really

230

00:11:00,929 --> 00:11:05,250

nice about being able to inspire

231

00:11:02,299 --> 00:11:06,899

melodies embroideries tonight and they

232

00:11:05,250 --> 00:11:09,448

just look fantastic hopefully we'll have

233

00:11:06,899 --> 00:11:11,309

some photos up of them somewhere you're

234

00:11:09,448 --> 00:11:14,129

doing them self pictures just by

235

00:11:11,309 --> 00:11:15,319

themselves a staggered out just almost

236

00:11:14,129 --> 00:11:18,860

something likes

237

00:11:15,320 --> 00:11:21,470

the wonderful organic shapes and it does

238

00:11:18,860 --> 00:11:23,269

remind one of the cosmos and galaxies

239

00:11:21,470 --> 00:11:24,950

absolutely sometimes when you're looking

240

00:11:23,269 --> 00:11:26,600

down a microscope it really reminds me

241

00:11:24,950 --> 00:11:28,940

of looking through a telescope it's

242

00:11:26,600 --> 00:11:31,970

amazing that the similar shapes inside

243

00:11:28,940 --> 00:11:33,890
our brain and the processes is also out

244

00:11:31,970 --> 00:11:35,570
there in the universe and speaking of

245

00:11:33,889 --> 00:11:37,610
telescopes Adam isn't that how you guys

246

00:11:35,570 --> 00:11:39,140
kind of mesh and sort of started this

247

00:11:37,610 --> 00:11:41,889
collaboration that's right about five

248

00:11:39,139 --> 00:11:46,639
years ago melody and I meant doing adult

249

00:11:41,889 --> 00:11:48,889
education course in astronomy and then

250

00:11:46,639 --> 00:11:51,080
we sort of lost contact when I moved up

251

00:11:48,889 --> 00:11:54,649
to Queensland to start working at QB I

252

00:11:51,080 --> 00:11:57,350
and then melody heard me interviewed the

253

00:11:54,649 --> 00:11:58,579
doctor a German we came up for many guys

254

00:11:57,350 --> 00:12:00,500
coming for the Australian skeptics

255

00:11:58,580 --> 00:12:04,250
conference and dr. Reiter did the tour

256

00:12:00,500 --> 00:12:07,600
and nobody sent me leave our guys was so

257

00:12:04,250 --> 00:12:11,299
lovely to hit your voice again together

258
00:12:07,600 --> 00:12:13,250
and I know this lady Cheryl that would

259
00:12:11,299 --> 00:12:14,779
be really interested in doing this

260
00:12:13,250 --> 00:12:16,759
science our project I think we should

261
00:12:14,779 --> 00:12:19,279
get together so Mellie you're a skeptic

262
00:12:16,759 --> 00:12:21,350
zona I am I listen to it while I'm doing

263
00:12:19,279 --> 00:12:23,509
embroidery well there you go that's

264
00:12:21,350 --> 00:12:24,950
fantastic and let's just step over now

265
00:12:23,509 --> 00:12:26,779
and we can discuss a few of the

266
00:12:24,950 --> 00:12:28,520
wonderful pieces of embroidery that are

267
00:12:26,779 --> 00:12:31,370
hanging here on the wall in this

268
00:12:28,519 --> 00:12:33,500
exhibition this one let me start with

269
00:12:31,370 --> 00:12:37,700
this this one in the middle here which

270
00:12:33,500 --> 00:12:40,009
is just just a burst of wonderful colors

271
00:12:37,700 --> 00:12:43,879

and can you explain that one for that

272

00:12:40,009 --> 00:12:46,189

one is based on an NRI image of a

273

00:12:43,879 --> 00:12:49,370

mouse-brain showing the axonal

274

00:12:46,190 --> 00:12:52,580

connections and it's worked in French

275

00:12:49,370 --> 00:12:54,590

knots to represent the each French not

276

00:12:52,580 --> 00:12:58,330

represents a bulb in the original image

277

00:12:54,590 --> 00:13:01,389

that shows a large or small connection

278

00:12:58,330 --> 00:13:04,490

that was the original image was by

279

00:13:01,389 --> 00:13:08,029

random more drink at Queensland brain

280

00:13:04,490 --> 00:13:10,340

institute and took about 16 hours in the

281

00:13:08,029 --> 00:13:12,500

MRI machine to make so it's very

282

00:13:10,340 --> 00:13:17,000

intricate lots of friends nods it took

283

00:13:12,500 --> 00:13:19,600

me about 40 hours to stitch it and what

284

00:13:17,000 --> 00:13:19,600

else tour de no

285

00:13:22,350 --> 00:13:28,629

so one of the reasons we take these

286
00:13:25,960 --> 00:13:30,400
really high resolution to MRI images is

287
00:13:28,629 --> 00:13:33,309
we're trying to capture disease and its

288
00:13:30,399 --> 00:13:35,439
really early processes so if we ever

289
00:13:33,309 --> 00:13:38,229
going to be able to treat your

290
00:13:35,440 --> 00:13:39,730
degenerative diseases or diseases of the

291
00:13:38,230 --> 00:13:41,500
brain we need to be able to detect them

292
00:13:39,730 --> 00:13:43,620
early so we use these really

293
00:13:41,500 --> 00:13:47,230
high-powered MRI images to see if we can

294
00:13:43,620 --> 00:13:49,330
capture the very early stages of disease

295
00:13:47,230 --> 00:13:51,909
and we get these really beautiful and

296
00:13:49,330 --> 00:13:53,980
intricate and high-resolution images of

297
00:13:51,909 --> 00:13:56,459
the brain and we were able to effect a

298
00:13:53,980 --> 00:13:58,539
small amount of sellers in early disease

299
00:13:56,460 --> 00:13:59,980
so you were saying during your

300
00:13:58,539 --> 00:14:02,469
presentation this is one of the most

301
00:13:59,980 --> 00:14:05,220
powerful MRIs yeah in the southern

302
00:14:02,470 --> 00:14:07,420
hannahs this is the most powerful MRI

303
00:14:05,220 --> 00:14:11,110
machine in the southern hemisphere it's

304
00:14:07,419 --> 00:14:12,250
a 16-point for Tesla for the physicists

305
00:14:11,110 --> 00:14:16,740
out there though know what I'm talking

306
00:14:12,250 --> 00:14:20,679
about it's one of us it's one of them

307
00:14:16,740 --> 00:14:25,149
it's one of the top five in the world

308
00:14:20,679 --> 00:14:27,370
now this is an experimental machine so

309
00:14:25,149 --> 00:14:29,350
to be able to reach something in this

310
00:14:27,370 --> 00:14:31,779
machine you need to be less than six

311
00:14:29,350 --> 00:14:34,060
centimeters be and you need to stay

312
00:14:31,779 --> 00:14:37,480
completely still for 16 hours so it's

313
00:14:34,059 --> 00:14:39,279
purely an experimental machine so in the

314

00:14:37,480 --> 00:14:40,810
future when the technology catches up

315
00:14:39,279 --> 00:14:43,600
we'll be able to do these type of

316
00:14:40,809 --> 00:14:45,009
analysis on the human brain and if

317
00:14:43,600 --> 00:14:46,450
people want to see the pictures we're

318
00:14:45,009 --> 00:14:48,639
going to put them up you have a blog

319
00:14:46,450 --> 00:14:49,930
melody which will give the address later

320
00:14:48,639 --> 00:14:51,699
but we'll put the pictures up for our

321
00:14:49,929 --> 00:14:53,799
listeners let's discuss this one which

322
00:14:51,700 --> 00:14:55,690
is right next to it which I must admit

323
00:14:53,799 --> 00:14:57,129
if you had this in your presentation I

324
00:14:55,690 --> 00:15:00,130
had to duck out to feed the meter

325
00:14:57,129 --> 00:15:02,679
unfortunately it wasn't excellent but as

326
00:15:00,129 --> 00:15:05,080
soon as I walked round the corner human

327
00:15:02,679 --> 00:15:07,239
and I had a look at this embroidery the

328
00:15:05,080 --> 00:15:09,270

first thing that struck me was a mouse

329

00:15:07,240 --> 00:15:12,549

maze of course and that's the whole idea

330

00:15:09,269 --> 00:15:14,590

yes it actually started with one of the

331

00:15:12,549 --> 00:15:15,639

other words which will probably discuss

332

00:15:14,590 --> 00:15:17,560

later

333

00:15:15,639 --> 00:15:20,199

the big brain structure called the

334

00:15:17,559 --> 00:15:22,589

dentate gyrus which looks a little bit

335

00:15:20,200 --> 00:15:24,790

like a tail as well as the tooth and

336

00:15:22,590 --> 00:15:27,490

because it's from a mouse brain I was

337

00:15:24,789 --> 00:15:28,750

thinking about mice and tails and I

338

00:15:27,490 --> 00:15:30,399

remembered a book that I read as a

339

00:15:28,750 --> 00:15:33,669

teenager called flowers for algernon

340

00:15:30,399 --> 00:15:38,620

which is was very popular in the 1970s

341

00:15:33,669 --> 00:15:41,259

about a young man who with below-average

342

00:15:38,620 --> 00:15:45,250

intelligence who gets involved in an

343
00:15:41,259 --> 00:15:48,909
experiment becomes a genius the movie

344
00:15:45,250 --> 00:15:50,679
became super smart but yes and he had a

345
00:15:48,909 --> 00:15:53,769
friend called Algernon who was a mouse

346
00:15:50,679 --> 00:15:56,379
who had had the same process so it's

347
00:15:53,769 --> 00:15:59,799
totally fictional but it's a very moving

348
00:15:56,379 --> 00:16:03,970
story about the way intelligence works

349
00:15:59,799 --> 00:16:05,529
and about the way science works too they

350
00:16:03,970 --> 00:16:07,660
asked him what he thought about the

351
00:16:05,529 --> 00:16:12,939
future and he said a TV in every room he

352
00:16:07,659 --> 00:16:14,919
wasn't wrong so that's where I got the

353
00:16:12,940 --> 00:16:16,780
inspiration for the maze embroidery

354
00:16:14,919 --> 00:16:21,099
because I was thinking about mice and

355
00:16:16,779 --> 00:16:23,169
Tails and the tail of the mouse in Lewis

356
00:16:21,100 --> 00:16:25,000
Carroll's Alice in Wonderland where it

357
00:16:23,169 --> 00:16:27,969
goes in the shape of a tail down the

358
00:16:25,000 --> 00:16:30,820
page so there are lots of thoughts that

359
00:16:27,970 --> 00:16:33,129
went into that one but yes it's funny I

360
00:16:30,820 --> 00:16:34,390
mean it really does say a lot and you

361
00:16:33,129 --> 00:16:36,189
were saying before and one of the things

362
00:16:34,389 --> 00:16:38,679
I was commenting is I really like the

363
00:16:36,190 --> 00:16:40,330
story behind the artwork now let's just

364
00:16:38,679 --> 00:16:44,079
step over to the other side of the

365
00:16:40,330 --> 00:16:45,970
exhibition and I must admit I like them

366
00:16:44,080 --> 00:16:49,270
all but this one really did catch my

367
00:16:45,970 --> 00:16:52,269
attention because the little story

368
00:16:49,269 --> 00:16:54,279
involved it's like to discuss that what

369
00:16:52,269 --> 00:16:56,110
this one is based on the dentate gyrus

370
00:16:54,279 --> 00:16:59,189
in a mouse's brain it's one of Adam's

371

00:16:56,110 --> 00:17:01,659
images of neurogenesis or stillbirth

372
00:16:59,190 --> 00:17:04,990
which you can probably tell you more

373
00:17:01,659 --> 00:17:09,000
about but the idea of behind the image

374
00:17:04,990 --> 00:17:11,709
is that it's a fairly abstract

375
00:17:09,000 --> 00:17:14,049
representation of the way new brain

376
00:17:11,709 --> 00:17:17,740
cells grow and make connections in the

377
00:17:14,049 --> 00:17:21,009
brain tissue so the stitches around the

378
00:17:17,740 --> 00:17:21,459
tooth shaped or the tail shaped central

379
00:17:21,009 --> 00:17:25,148
part

380
00:17:21,459 --> 00:17:27,459
reach out towards the other cells in the

381
00:17:25,148 --> 00:17:29,019
brain which are depicted in the

382
00:17:27,459 --> 00:17:32,259
embroidery it also struck me as

383
00:17:29,019 --> 00:17:34,839
something almost like primitive cultures

384
00:17:32,259 --> 00:17:37,058
artwork can you see that what I mean yes

385
00:17:34,839 --> 00:17:38,558

with the patterns and everything there

386

00:17:37,058 --> 00:17:40,918

but I love the fact that it's telling a

387

00:17:38,558 --> 00:17:43,028

story as well well a lot of embroidery

388

00:17:40,919 --> 00:17:47,440

traditionally comes from that background

389

00:17:43,028 --> 00:17:49,869

it starts as a natural form which people

390

00:17:47,440 --> 00:17:52,179

represent in stitches on their clothing

391

00:17:49,869 --> 00:17:55,629

or on practical items to make them

392

00:17:52,179 --> 00:17:58,419

beautiful and I think that this one

393

00:17:55,630 --> 00:17:59,919

works in the same way it takes just an

394

00:17:58,419 --> 00:18:02,110

image from nature although it's a

395

00:17:59,919 --> 00:18:05,230

microscope image and just turns it into

396

00:18:02,109 --> 00:18:07,569

a design that can speak to you in a

397

00:18:05,230 --> 00:18:09,159

different way it was also interesting to

398

00:18:07,569 --> 00:18:11,319

and something I'd like to briefly

399

00:18:09,159 --> 00:18:13,809

discuss with you Adam as you were saying

400
00:18:11,319 --> 00:18:16,720
in your talking about the myth on cell

401
00:18:13,808 --> 00:18:18,490
death in the brain once the brain cells

402
00:18:16,720 --> 00:18:20,308
die that's in which is something I

403
00:18:18,490 --> 00:18:22,240
certainly grew up believing yeah

404
00:18:20,308 --> 00:18:25,869
neurogenesis is one of those great

405
00:18:22,240 --> 00:18:27,640
scientific stories where long-held

406
00:18:25,869 --> 00:18:29,859
scientific belief has just had to be

407
00:18:27,640 --> 00:18:31,809
thrown out because new data has come

408
00:18:29,859 --> 00:18:34,658
along we've had to completely rethink

409
00:18:31,808 --> 00:18:36,639
how the brain works yeah I for a long

410
00:18:34,659 --> 00:18:38,830
time ever since the days of kahala and

411
00:18:36,640 --> 00:18:40,630
hurling neuroscience it was thought that

412
00:18:38,829 --> 00:18:42,339
the number of cells that we're all with

413
00:18:40,630 --> 00:18:46,090
was all you were going to have for the

414
00:18:42,339 --> 00:18:48,369
rest of your life then in 1983 was first

415
00:18:46,089 --> 00:18:50,859
found in a bird brain actually that the

416
00:18:48,369 --> 00:18:53,349
words these new cells have been born in

417
00:18:50,859 --> 00:18:55,599
the bright so we completely had to

418
00:18:53,349 --> 00:18:58,389
rethink and then people started looking

419
00:18:55,599 --> 00:19:00,699
into mammals and other mammals there by

420
00:18:58,390 --> 00:19:03,009
the early linings neurogenesis have been

421
00:19:00,700 --> 00:19:06,429
found in most mammal species including

422
00:19:03,009 --> 00:19:08,679
the human brain so Iran's are being born

423
00:19:06,429 --> 00:19:10,360
in your brain all the time there's a

424
00:19:08,679 --> 00:19:11,860
hope for us all but for each

425
00:19:10,359 --> 00:19:14,579
and you also had some interesting

426
00:19:11,859 --> 00:19:17,399
information Adam about how

427
00:19:14,579 --> 00:19:20,500
antidepressants can actually encourage

428

00:19:17,400 --> 00:19:22,240
neurogenesis and also exercise when you

429
00:19:20,500 --> 00:19:25,359
say exercise do you mean exercising your

430
00:19:22,240 --> 00:19:28,180
brain or your body I mean your body so

431
00:19:25,359 --> 00:19:30,549
we we're trying to understand things

432
00:19:28,180 --> 00:19:33,220
that can stimulate this process in the

433
00:19:30,549 --> 00:19:35,440
brain so your Genesis doesn't happen all

434
00:19:33,220 --> 00:19:37,720
over the brain happens in two specific

435
00:19:35,440 --> 00:19:39,970
regions of the brain there's one called

436
00:19:37,720 --> 00:19:42,130
the subventricular zone and they supply

437
00:19:39,970 --> 00:19:45,309
to yourselves to your olfactory cortex

438
00:19:42,130 --> 00:19:46,840
so where we smell and we think the

439
00:19:45,309 --> 00:19:48,129
reason that this is is because these

440
00:19:46,839 --> 00:19:50,949
cells are so exposed to the environment

441
00:19:48,130 --> 00:19:53,500
and chemicals so they lead to get turn

442
00:19:50,950 --> 00:19:55,299

over all the time so in another area of

443

00:19:53,500 --> 00:19:56,950

the brain in the hippocampus which is

444

00:19:55,299 --> 00:19:59,619

involved in learning and memory we've

445

00:19:56,950 --> 00:20:03,960

also shown this these new cells being

446

00:19:59,619 --> 00:20:03,959

born and integrated into the circuitry

447

00:20:08,250 --> 00:20:14,259

okay so we're trying to study what sort

448

00:20:11,769 --> 00:20:16,059

of things can we stimulate particularly

449

00:20:14,259 --> 00:20:17,559

these dentate gyrus ones on these

450

00:20:16,059 --> 00:20:19,210

hippocampal one because they're involved

451

00:20:17,559 --> 00:20:21,659

in learning a memory and what we've

452

00:20:19,210 --> 00:20:24,370

shown in a laboratory is that

453

00:20:21,660 --> 00:20:26,740

antidepressants can stimulate this this

454

00:20:24,369 --> 00:20:30,219

may be one mechanism about how they're

455

00:20:26,740 --> 00:20:32,529

working to improve people's outlook

456

00:20:30,220 --> 00:20:33,819

potentially I mean we don't know that

457
00:20:32,529 --> 00:20:36,399
for sure we don't know what the

458
00:20:33,819 --> 00:20:38,589
functional outcome of this neurogenesis

459
00:20:36,400 --> 00:20:41,470
easier we just know antidepressants can

460
00:20:38,589 --> 00:20:45,459
stimulator certain hormones can also

461
00:20:41,470 --> 00:20:48,069
stimulate it and exercise interesting

462
00:20:45,460 --> 00:20:50,410
physical exercise but it must be

463
00:20:48,069 --> 00:20:52,809
voluntary which is really interesting so

464
00:20:50,410 --> 00:20:56,050
if you want to go out for a run it needs

465
00:20:52,809 --> 00:20:57,409
to do rewarding and I need to be

466
00:20:56,049 --> 00:21:00,819
motivated to do

467
00:20:57,410 --> 00:21:03,800
please stick a mouse on on a treadmill

468
00:21:00,819 --> 00:21:05,599
and make it mom we get non-euro Genesis

469
00:21:03,799 --> 00:21:08,149
if you stick a running wheel in the cage

470
00:21:05,599 --> 00:21:09,949
then we get great neurogenesis so if you

471
00:21:08,150 --> 00:21:11,840
give them the option of using another

472
00:21:09,950 --> 00:21:14,509
option and they do what I love to run

473
00:21:11,839 --> 00:21:16,279
but if they choose to run with megan

474
00:21:14,509 --> 00:21:18,799
mutants so the lesson for our listeners

475
00:21:16,279 --> 00:21:22,190
Richard is get on that treadmill funny

476
00:21:18,799 --> 00:21:24,490
of you want to you want to just lastly

477
00:21:22,190 --> 00:21:26,330
can we talk about the apoptosis

478
00:21:24,490 --> 00:21:27,920
embroideries Melanie because I

479
00:21:26,329 --> 00:21:30,470
absolutely love this one it was one I

480
00:21:27,920 --> 00:21:32,930
get it was my garlic sea or something

481
00:21:30,470 --> 00:21:37,160
that's not these ones are going to quite

482
00:21:32,930 --> 00:21:40,009
abstract designs rather than repin than

483
00:21:37,160 --> 00:21:42,440
visual representations but basically

484
00:21:40,009 --> 00:21:46,490
then if you look at the three of them as

485

00:21:42,440 --> 00:21:48,620
a set the first one the stitches are all

486
00:21:46,490 --> 00:21:53,390
connected and they go in rows and

487
00:21:48,619 --> 00:21:56,389
they're quite ordered and put together

488
00:21:53,390 --> 00:21:58,730
the second one you can see the chaos of

489
00:21:56,390 --> 00:22:01,610
the dying cells the stitches are not

490
00:21:58,730 --> 00:22:07,579
connected the background is very messy

491
00:22:01,609 --> 00:22:10,549
and but it's not messy I suppose it's

492
00:22:07,579 --> 00:22:13,279
yet coyote and so you can see the

493
00:22:10,549 --> 00:22:15,769
destruction of the cells there and then

494
00:22:13,279 --> 00:22:17,660
the third one in the series which is

495
00:22:15,769 --> 00:22:20,779
based on Adams image that shows only a

496
00:22:17,660 --> 00:22:23,120
few living cells is quite blank except

497
00:22:20,779 --> 00:22:25,700
for right now here's the three in

498
00:22:23,119 --> 00:22:29,229
context rihanna's yes yeah so the first

499
00:22:25,700 --> 00:22:32,029

one is someone ordered the second one is

500

00:22:29,230 --> 00:22:36,019

very chaotic and the third one is very

501

00:22:32,029 --> 00:22:38,789

simplistic yes the middle minimalist I

502

00:22:36,019 --> 00:22:40,799

think there's hope in that third one

503

00:22:38,789 --> 00:22:43,649

because the cells that remain are still

504

00:22:40,799 --> 00:22:45,659

connected so it's not all bad news now

505

00:22:43,650 --> 00:22:47,640

by now our listeners are just going to

506

00:22:45,660 --> 00:22:49,230

see what we're talking about where can

507

00:22:47,640 --> 00:22:52,380

they run with their fingers on the

508

00:22:49,230 --> 00:22:56,160

Internet to have a look our blog is at

509

00:22:52,380 --> 00:23:00,780

culture at work or one word hyphen

510

00:22:56,160 --> 00:23:01,950

Hamlin hyphen Lord blogspot com I hope

511

00:23:00,779 --> 00:23:04,349

you'll put a link to that because it's

512

00:23:01,950 --> 00:23:06,480

hard to remember where the ruling and

513

00:23:04,349 --> 00:23:09,629

the works are all on there in one form

514
00:23:06,480 --> 00:23:11,940
or another I'll put up finished pictures

515
00:23:09,630 --> 00:23:14,520
of them soon and there's also some of

516
00:23:11,940 --> 00:23:16,769
your microscopy up there Adam and so the

517
00:23:14,519 --> 00:23:18,660
images that inspired melodies

518
00:23:16,769 --> 00:23:20,339
embroideries are also on the block so

519
00:23:18,660 --> 00:23:22,500
people want to end it to trick that of

520
00:23:20,339 --> 00:23:24,720
how they how Adam created them in what

521
00:23:22,500 --> 00:23:27,329
they represent two from Adam rumors on

522
00:23:24,720 --> 00:23:29,640
that what a wonderful project you guys

523
00:23:27,329 --> 00:23:32,699
I'm so inspired it was so fantastic to

524
00:23:29,640 --> 00:23:34,140
see science and art which I always have

525
00:23:32,700 --> 00:23:36,090
thought should be together because I

526
00:23:34,140 --> 00:23:38,040
come from an art background but to

527
00:23:36,089 --> 00:23:41,250
actually see it come together in such a

528
00:23:38,039 --> 00:23:45,829
great exhibition was fantastic thank you

529
00:23:41,250 --> 00:23:45,829
for doing your Ponte me thank you enjoy

530
00:23:58,759 --> 00:24:02,970
astronomy cast who takes a fact space

531
00:24:01,109 --> 00:24:04,889
journey through the cosmos as it offers

532
00:24:02,970 --> 00:24:07,559
listeners weekly discussions on

533
00:24:04,890 --> 00:24:10,560
astronomical topics ranging from planets

534
00:24:07,559 --> 00:24:12,929
to cosmology hosted by Fraser Cain of

535
00:24:10,559 --> 00:24:13,799
Universe Today and myself dr. Pamela gay

536
00:24:12,930 --> 00:24:16,470
of southern illinois university

537
00:24:13,799 --> 00:24:18,329
edwardsville this show brings the

538
00:24:16,470 --> 00:24:20,759
questions of an avid astronomy lover

539
00:24:18,329 --> 00:24:22,859
directly to an astronomer together

540
00:24:20,759 --> 00:24:24,390
Fraser and I explore what is known and

541
00:24:22,859 --> 00:24:27,149
being discovered about the universe

542

00:24:24,390 --> 00:24:29,250
around us join us each week as we take a

543
00:24:27,150 --> 00:24:32,780
fact space journey through the cosmos at

544
00:24:29,250 --> 00:24:32,779
astronomy cast calm

545
00:24:37,079 --> 00:24:50,649
join us now for drinking skeptically in

546
00:24:40,480 --> 00:24:57,279
the think tank screaming children of

547
00:24:50,650 --> 00:25:02,440
left cheers everybody she is I can't

548
00:24:57,279 --> 00:25:11,170
clinically lets me how people here side

549
00:25:02,440 --> 00:25:12,549
you have their cheese all the rest of

550
00:25:11,170 --> 00:25:15,150
you can go home now we'll just stick

551
00:25:12,549 --> 00:25:19,419
with it what we haven't yet thank you

552
00:25:15,150 --> 00:25:21,100
joining me oh dear you should see what's

553
00:25:19,420 --> 00:25:23,590
going on here folks joining me in the

554
00:25:21,099 --> 00:25:24,939
think tank tonight in our favorite club

555
00:25:23,589 --> 00:25:26,909
down the street in the Chinese

556
00:25:24,940 --> 00:25:30,789

restaurant alone along the back wall

557

00:25:26,910 --> 00:25:33,130

Iran so give hello Iran hello written we

558

00:25:30,789 --> 00:25:35,409

also have our favorite Diane bish top

559

00:25:33,130 --> 00:25:40,300

and hello Diane I'm itching hi how do

560

00:25:35,410 --> 00:25:44,290

you say hello in Dutch honey hello so

561

00:25:40,299 --> 00:25:46,859

exotic boy and Dinah Lee give me some

562

00:25:44,289 --> 00:25:50,950

more dutch words throughout the evening

563

00:25:46,859 --> 00:25:55,119

miss some of them not nice probably is

564

00:25:50,950 --> 00:25:57,009

nurse joke hello joy hi Joe I like your

565

00:25:55,119 --> 00:25:58,899

little bro chiefing I thank you thank

566

00:25:57,009 --> 00:26:02,140

you it's very artistic they're very um

567

00:25:58,900 --> 00:26:08,550

not not appropriate for a podcast is it

568

00:26:02,140 --> 00:26:13,930

no not really my gosh dr. Rachel Bonjour

569

00:26:08,549 --> 00:26:16,629

ha whooping here that's German having a

570

00:26:13,930 --> 00:26:19,000

linguistically diverse think tanks

571
00:26:16,630 --> 00:26:27,820
tonight we are the neurons gonna say

572
00:26:19,000 --> 00:26:31,500
something in Hebrew ma no on idea ok

573
00:26:27,819 --> 00:26:36,099
give you something very some zoo

574
00:26:31,500 --> 00:26:40,029
well Oh Darren son born up what's that

575
00:26:36,099 --> 00:26:41,949
mean hello how are you I think we should

576
00:26:40,029 --> 00:26:45,308
get on with a think tank now actually we

577
00:26:41,950 --> 00:26:48,130
stopped in love editing work to do no no

578
00:26:45,308 --> 00:26:49,418
heavens above now I look just something

579
00:26:48,130 --> 00:26:51,179
that caught my eye before we get into

580
00:26:49,419 --> 00:26:54,038
the interesting topics of the week

581
00:26:51,179 --> 00:26:56,350
walking into the our club tonight on the

582
00:26:54,038 --> 00:27:01,210
wall there are two ads two posters for

583
00:26:56,349 --> 00:27:03,129
upcoming psychic events no yes they do I

584
00:27:01,210 --> 00:27:04,419
think just to a noise I think they also

585
00:27:03,130 --> 00:27:08,260
put them up when they know we're not

586
00:27:04,419 --> 00:27:10,809
coming unfortunately I just have a lot

587
00:27:08,259 --> 00:27:13,359
of psychic events and it's you do we

588
00:27:10,808 --> 00:27:16,298
have a psychic festival coming up in

589
00:27:13,359 --> 00:27:17,889
june or july i think so they have one

590
00:27:16,298 --> 00:27:20,710
every six months like mind-body wallet

591
00:27:17,890 --> 00:27:25,390
downs done downtown and i've also got a

592
00:27:20,710 --> 00:27:28,720
special one-day psychic workshop only

593
00:27:25,390 --> 00:27:31,179
you're only a hundred dollars only a

594
00:27:28,720 --> 00:27:33,429
hundred dollars you know what I that I

595
00:27:31,179 --> 00:27:36,120
always were these evenings I always want

596
00:27:33,429 --> 00:27:39,909
to see I want to once once in up my life

597
00:27:36,119 --> 00:27:43,538
have put my hands on the letter of

598
00:27:39,909 --> 00:27:45,940
invitation to a psychic like a letter

599

00:27:43,538 --> 00:27:49,509
that invites them to join such a psychic

600
00:27:45,940 --> 00:27:53,279
festival yeah oh I see it's just it

601
00:27:49,509 --> 00:27:55,419
would be just the rase just for a woman

602
00:27:53,279 --> 00:27:59,288
don't open that letter I know what's

603
00:27:55,419 --> 00:28:02,350
inside speaking about psychics let's

604
00:27:59,288 --> 00:28:05,140
just rattle off in what I've gathered as

605
00:28:02,349 --> 00:28:07,439
the four big big E's for the year so far

606
00:28:05,140 --> 00:28:11,110
more big events that they've all missed

607
00:28:07,440 --> 00:28:13,450
starting off the haiti earthquake the

608
00:28:11,109 --> 00:28:15,279
volcano which no one can pronounce the

609
00:28:13,450 --> 00:28:18,150
name of in Iceland which is still

610
00:28:15,279 --> 00:28:19,599
causing trouble at cult veneers can Oh

611
00:28:18,150 --> 00:28:21,820
in fact

612
00:28:19,599 --> 00:28:24,129
on media what's last week being able to

613
00:28:21,819 --> 00:28:26,230

do it we'll just say the icelandic

614

00:28:24,130 --> 00:28:29,049

volcano you all know what i mean again

615

00:28:26,230 --> 00:28:32,259

causing trouble chilean earthquake was

616

00:28:29,048 --> 00:28:36,519

that this was that was this year this is

617

00:28:32,259 --> 00:28:38,650

JT haiti was this year whenever the

618

00:28:36,519 --> 00:28:42,730

chilly one was it wasn't predicted it

619

00:28:38,650 --> 00:28:44,679

wasn't um the oil spill in the united

620

00:28:42,730 --> 00:28:47,650

states which they are saying is one of

621

00:28:44,679 --> 00:28:50,650

the biggest oil disasters I believe it's

622

00:28:47,650 --> 00:28:54,640

now gone it's it's more than the exxon

623

00:28:50,650 --> 00:28:57,960

valdez now it is huge yeah it was on the

624

00:28:54,640 --> 00:29:00,690

news again a huge story hello I mean and

625

00:28:57,960 --> 00:29:03,429

there's a side note Australia has a new

626

00:29:00,690 --> 00:29:07,538

sporting champion world snooker champion

627

00:29:03,429 --> 00:29:11,470

oh yeah you didn't hear about that from

628
00:29:07,538 --> 00:29:14,319
the psychics no no Stephen Fry torture

629
00:29:11,470 --> 00:29:16,058
unless we clever I think it was a good

630
00:29:14,319 --> 00:29:18,210
even if our big deal city in protected

631
00:29:16,058 --> 00:29:20,859
speech would be name-dropping know

632
00:29:18,210 --> 00:29:22,870
already dropped convenience and stable

633
00:29:20,859 --> 00:29:25,000
fry I got rivered it wasn't pointed out

634
00:29:22,869 --> 00:29:26,798
that um we're actually mistaken by

635
00:29:25,000 --> 00:29:29,109
referring to this is an oil spill in oil

636
00:29:26,798 --> 00:29:30,579
spill is when a bunch of oil falls out

637
00:29:29,109 --> 00:29:33,189
of a ship as opposed to what's going on

638
00:29:30,579 --> 00:29:35,918
a massive oil rig notion which which I

639
00:29:33,190 --> 00:29:37,330
imagine would be a far yeah but but I

640
00:29:35,919 --> 00:29:39,100
mean I would imagine it would be a much

641
00:29:37,329 --> 00:29:42,449
greater proportion anyway than the spill

642
00:29:39,099 --> 00:29:42,449
Sheree bit just the volume

643
00:29:43,809 --> 00:29:51,579
alright and before I pass over pass the

644
00:29:48,880 --> 00:29:53,020
microphone over to dr. H he and Joe

645
00:29:51,579 --> 00:29:54,339
you're not gonna pass over right I'm not

646
00:29:53,019 --> 00:29:56,859
gonna pass over right here how the food

647
00:29:54,339 --> 00:30:02,049
was pretty good actually I assure you

648
00:29:56,859 --> 00:30:03,789
the food was fine listeners in the

649
00:30:02,049 --> 00:30:06,159
mid-north coast area or the north coast

650
00:30:03,789 --> 00:30:09,069
area of New South Wales around them

651
00:30:06,160 --> 00:30:11,380
mucker heads the name buck of valley you

652
00:30:09,069 --> 00:30:13,869
can hear portions of the skeptic zone

653
00:30:11,380 --> 00:30:18,100
including great insult and dr. H in some

654
00:30:13,869 --> 00:30:21,809
other things on radio too NVR FM and

655
00:30:18,099 --> 00:30:24,759
that's 10 5.9 on your fm dial they

656

00:30:21,809 --> 00:30:26,919
replaying parts of the skeptic zone on

657
00:30:24,759 --> 00:30:29,140
public radio so that's really good next

658
00:30:26,920 --> 00:30:34,000
that's excellent and thank you to the

659
00:30:29,140 --> 00:30:39,640
people there at Radio 2 in the rfm dr.

660
00:30:34,000 --> 00:30:42,730
aging yes dr. Richard uh nurse Joe and I

661
00:30:39,640 --> 00:30:45,130
am pouring over some literature at the

662
00:30:42,730 --> 00:30:47,589
moment which I was alerted to last night

663
00:30:45,130 --> 00:30:50,740
on twitter by Professor David Cahoon now

664
00:30:47,589 --> 00:30:53,859
there I go name-dropping you smile you

665
00:30:50,740 --> 00:30:58,480
mean okay yes that's Joe at so better

666
00:30:53,859 --> 00:31:01,389
mood is that right dr. AG it is at

667
00:30:58,480 --> 00:31:07,509
skeptic tyne and oh look over there they

668
00:31:01,390 --> 00:31:15,840
said tired underscore haha that's just

669
00:31:07,509 --> 00:31:18,929
me let me you don't want at me anyway um

670
00:31:15,839 --> 00:31:21,298

I what basically what we're looking at

671

00:31:18,929 --> 00:31:23,130

is a document for the what's it called

672

00:31:21,298 --> 00:31:25,470

Joe national national institute of

673

00:31:23,130 --> 00:31:27,179

complementary medicine yeah the national

674

00:31:25,470 --> 00:31:29,610

issue of complementary medicine which I

675

00:31:27,179 --> 00:31:31,860

only discovered last night no exists in

676

00:31:29,609 --> 00:31:34,109

Australia yes I was actually quite

677

00:31:31,859 --> 00:31:37,740

stunned to realize I didn't know this

678

00:31:34,109 --> 00:31:39,750

existed in Australia well I dug up the

679

00:31:37,740 --> 00:31:41,069

information from the website last night

680

00:31:39,750 --> 00:31:44,099

when I was doing some googling for

681

00:31:41,069 --> 00:31:46,019

another reason and upon reading the

682

00:31:44,099 --> 00:31:47,730

background of it I realized that I

683

00:31:46,019 --> 00:31:49,829

didn't know this was happening here but

684

00:31:47,730 --> 00:31:52,140

for international license this is kind

685
00:31:49,829 --> 00:31:53,819
of the Australian equivalent of n cam

686
00:31:52,140 --> 00:31:55,080
which is the national center for

687
00:31:53,819 --> 00:31:58,889
complementary and alternative medicine

688
00:31:55,079 --> 00:32:01,798
set up by the NIH in the state and

689
00:31:58,890 --> 00:32:04,830
they've been criticized a lot because

690
00:32:01,798 --> 00:32:09,240
they've already spent 2.5 billion

691
00:32:04,829 --> 00:32:12,240
dollars since they're setting up and so

692
00:32:09,240 --> 00:32:17,460
far they've pretty much found nothing

693
00:32:12,240 --> 00:32:19,589
useful so this was instigated because in

694
00:32:17,460 --> 00:32:21,090
2006 the Chinese government announced

695
00:32:19,589 --> 00:32:23,148
they were going to put significant

696
00:32:21,089 --> 00:32:28,648
amounts of money into international

697
00:32:23,148 --> 00:32:30,000
collaborative research and basically

698
00:32:28,648 --> 00:32:31,558
they sent out a message across the world

699
00:32:30,000 --> 00:32:33,240
saying we want more research done on

700
00:32:31,558 --> 00:32:35,639
Chinese medicine because we want it more

701
00:32:33,240 --> 00:32:37,740
widely accepted because the Chinese

702
00:32:35,640 --> 00:32:39,929
themselves have come under a lot of

703
00:32:37,740 --> 00:32:42,419
criticism for reason reason i'm laughing

704
00:32:39,929 --> 00:32:44,490
is because again it's the gold thing the

705
00:32:42,419 --> 00:32:45,899
goal is not to find out whether it works

706
00:32:44,490 --> 00:32:49,109
so we can know whether to use it honor

707
00:32:45,898 --> 00:32:52,589
because we want it accept it the whole

708
00:32:49,109 --> 00:32:54,538
premise is the problem well because the

709
00:32:52,589 --> 00:32:57,769
Chinese have been heavily criticized for

710
00:32:54,538 --> 00:32:59,940
research into Chinese medicine and so

711
00:32:57,769 --> 00:33:01,679
the Australian government took advantage

712
00:32:59,940 --> 00:33:04,558
of the fact that the Chinese were giving

713

00:33:01,679 --> 00:33:06,450
out all this money and the National

714
00:33:04,558 --> 00:33:08,668
Medical Health and Medical Research

715
00:33:06,450 --> 00:33:11,788
Council the NHMRC that's our government

716
00:33:08,669 --> 00:33:15,179
body who hands up his research grants

717
00:33:11,788 --> 00:33:17,849
they in 2006 took a special initiative

718
00:33:15,179 --> 00:33:20,000
to hand out 5 million bucks to people

719
00:33:17,849 --> 00:33:22,019
who wanted to become involved in

720
00:33:20,000 --> 00:33:24,809
researching can

721
00:33:22,019 --> 00:33:27,269
can I be involved if you want to put in

722
00:33:24,809 --> 00:33:29,039
a garage oh oh yeah 45 million bucks I

723
00:33:27,269 --> 00:33:32,039
will well you don't get oh my god

724
00:33:29,039 --> 00:33:33,779
they've gotta let it out of it but yeah

725
00:33:32,039 --> 00:33:35,399
and I remember hearing about this

726
00:33:33,779 --> 00:33:37,500
because I remember hearing that the new

727
00:33:35,400 --> 00:33:39,509

south wales government was going to put

728

00:33:37,500 --> 00:33:43,019

in four million dollars towards building

729

00:33:39,509 --> 00:33:44,549

a specialized independent facility which

730

00:33:43,019 --> 00:33:46,470

at the time I thought was going to be

731

00:33:44,549 --> 00:33:47,759

part of the University of Sydney it

732

00:33:46,470 --> 00:33:51,559

turns out us at the University of

733

00:33:47,759 --> 00:33:53,879

Western Sydney and the Office of Science

734

00:33:51,559 --> 00:33:56,750

osm our Office of Science Medical

735

00:33:53,880 --> 00:34:00,570

Research Council which is a state-run

736

00:33:56,750 --> 00:34:02,640

science sort of outreach body they gave

737

00:34:00,569 --> 00:34:05,069

six hundred thousand dollars towards

738

00:34:02,640 --> 00:34:07,470

this project no I were you money money

739

00:34:05,069 --> 00:34:08,849

yeah just being thrown at it and I

740

00:34:07,470 --> 00:34:10,530

remember when I heard about this because

741

00:34:08,849 --> 00:34:12,869

I actually happen to be at a dinner with

742
00:34:10,530 --> 00:34:15,269
an MP a member of parliament who was

743
00:34:12,869 --> 00:34:17,489
involved in giving out this funding and

744
00:34:15,269 --> 00:34:20,639
I was asking them why they were putting

745
00:34:17,489 --> 00:34:22,859
all this money into this project anyway

746
00:34:20,639 --> 00:34:25,019
so that's the background but it but it

747
00:34:22,860 --> 00:34:27,390
turns out that this is yeah the National

748
00:34:25,019 --> 00:34:29,519
Center the National Institute of

749
00:34:27,389 --> 00:34:31,980
complementary medicine it's based at the

750
00:34:29,519 --> 00:34:33,119
University of Western Sydney and judge

751
00:34:31,980 --> 00:34:35,070
you want to talk a little bit about

752
00:34:33,119 --> 00:34:37,679
who's behind it and what they do yeah

753
00:34:35,070 --> 00:34:39,600
look it's actually a lot of interesting

754
00:34:37,679 --> 00:34:41,099
stuff when you when you get down to

755
00:34:39,599 --> 00:34:43,980
what's going on here and whose

756
00:34:41,099 --> 00:34:46,710
involvement on and look when I can't

757
00:34:43,980 --> 00:34:48,449
name any any names off the top of my

758
00:34:46,710 --> 00:34:50,668
head but a lot of people involved are

759
00:34:48,449 --> 00:34:53,189
people with you know significant

760
00:34:50,668 --> 00:34:55,199
scientific and research backgrounds in

761
00:34:53,190 --> 00:34:58,470
medicine and so on and there are a lot

762
00:34:55,199 --> 00:35:01,949
of very reputable people involved one

763
00:34:58,469 --> 00:35:03,959
name I did note however was on there and

764
00:35:01,949 --> 00:35:06,480
one of their advisory councils and

765
00:35:03,960 --> 00:35:09,179
that's dr. Karen Phelps Professor Kerin

766
00:35:06,480 --> 00:35:12,150
Phelps who we've spoken about before and

767
00:35:09,179 --> 00:35:15,679
she is actually the recipient of one of

768
00:35:12,150 --> 00:35:19,910
the grants for some research through her

769
00:35:15,679 --> 00:35:22,190
clinic which itself is a promoter and

770

00:35:19,909 --> 00:35:25,879
user of the complementary medicine and

771
00:35:22,190 --> 00:35:28,700
the specific garage in fact goes towards

772
00:35:25,880 --> 00:35:32,660
a bit of a an interesting thing that

773
00:35:28,699 --> 00:35:35,239
they're researching okay so so professor

774
00:35:32,659 --> 00:35:37,940
Phelps is on one of the advisory

775
00:35:35,239 --> 00:35:41,179
committees as I said and they're doing a

776
00:35:37,940 --> 00:35:42,950
study into Anna it's called an appraisal

777
00:35:41,179 --> 00:35:44,659
of Health Services data and outcome

778
00:35:42,949 --> 00:35:46,399
measurement tools for use in an

779
00:35:44,659 --> 00:35:49,159
Australian primary care integrative

780
00:35:46,400 --> 00:35:52,880
medicine setting and I mean really I

781
00:35:49,159 --> 00:35:54,858
think what they're looking at is what

782
00:35:52,880 --> 00:35:57,010
what Professor Phelps is very heavily

783
00:35:54,858 --> 00:35:59,779
promoting which is bringing

784
00:35:57,010 --> 00:36:01,069

complementary therapies into medical

785

00:35:59,780 --> 00:36:04,130

practices and it's something that her

786

00:36:01,068 --> 00:36:05,989

clinic is actually doing now the thing

787

00:36:04,130 --> 00:36:08,809

is and this is this is the problem I

788

00:36:05,989 --> 00:36:12,500

have with a lot of what this sir this

789

00:36:08,809 --> 00:36:15,019

institute is doing they I have no

790

00:36:12,500 --> 00:36:18,858

problem as it stands with research being

791

00:36:15,019 --> 00:36:20,538

done in to herbal medicines into you

792

00:36:18,858 --> 00:36:23,568

know a lot of the practices that they're

793

00:36:20,539 --> 00:36:24,619

looking at as complementary medicine or

794

00:36:23,568 --> 00:36:26,298

whatever you want to call it I've got a

795

00:36:24,619 --> 00:36:28,970

problem with research being done into it

796

00:36:26,298 --> 00:36:31,730

if it's good rigorous research what I

797

00:36:28,969 --> 00:36:33,500

have a problem with is that on the one

798

00:36:31,730 --> 00:36:35,409

hand there are some sides of this

799

00:36:33,500 --> 00:36:38,750

institute which seem to be really

800

00:36:35,409 --> 00:36:42,469

addressing the issues of rigor of good

801

00:36:38,750 --> 00:36:46,789

methodology of doing good research but

802

00:36:42,469 --> 00:36:48,618

on the other hand they are dabbling and

803

00:36:46,789 --> 00:36:51,020

mixing with some areas within

804

00:36:48,619 --> 00:36:52,910

complementary therapies which at face

805

00:36:51,019 --> 00:36:55,009

value in terms of things like prior

806

00:36:52,909 --> 00:36:58,278

plausibility can be thrown out the

807

00:36:55,010 --> 00:36:59,930

window like homeopathy now they're their

808

00:36:58,278 --> 00:37:01,429

main research grants are not going

809

00:36:59,929 --> 00:37:02,989

towards anything like that their

810

00:37:01,429 --> 00:37:07,000

research grants are going into things

811

00:37:02,989 --> 00:37:09,709

which you could say are reasonable

812

00:37:07,000 --> 00:37:12,380

research into for example the use of

813
00:37:09,710 --> 00:37:13,789
certain medicines certain herbal

814
00:37:12,380 --> 00:37:16,039
medicines and dementia and things like

815
00:37:13,789 --> 00:37:18,430
that and yes fair enough I can see why

816
00:37:16,039 --> 00:37:21,200
they would want to do that research part

817
00:37:18,429 --> 00:37:23,899
when they're then associated along with

818
00:37:21,199 --> 00:37:26,189
something like homeopathy or therapeutic

819
00:37:23,900 --> 00:37:28,680
touch things which have resounding

820
00:37:26,190 --> 00:37:30,179
been demonstrated to be no more

821
00:37:28,679 --> 00:37:32,639
effective than placebo and to have

822
00:37:30,179 --> 00:37:34,679
absolutely no merit whatsoever then I

823
00:37:32,639 --> 00:37:36,719
think that they're completely destroying

824
00:37:34,679 --> 00:37:38,279
any credibility this is one of the

825
00:37:36,719 --> 00:37:40,709
things that Steve novella was talking

826
00:37:38,280 --> 00:37:42,570
about recently when he had a meeting

827

00:37:40,710 --> 00:37:45,449
with one of the directors of n cam in

828
00:37:42,570 --> 00:37:47,940
the sea ice yeah and the new director

829
00:37:45,449 --> 00:37:49,949
there was saying well we haven't grant

830
00:37:47,940 --> 00:37:52,289
given grants that we are these are small

831
00:37:49,949 --> 00:37:55,529
years but they still have it lets you

832
00:37:52,289 --> 00:37:56,909
know cut it out of their option not know

833
00:37:55,530 --> 00:37:59,010
exactly so that it's like they're

834
00:37:56,909 --> 00:38:00,960
leaving the door open yeah and they've

835
00:37:59,010 --> 00:38:03,000
still got this association with these

836
00:38:00,960 --> 00:38:06,269
organizations and this can be seen very

837
00:38:03,000 --> 00:38:09,659
clearly when you look at so they've got

838
00:38:06,269 --> 00:38:13,050
here professional associations and

839
00:38:09,659 --> 00:38:15,899
really the way i took this was that this

840
00:38:13,050 --> 00:38:18,180
is a list of modalities that they are

841
00:38:15,900 --> 00:38:20,610

aligned with in terms of research and

842

00:38:18,179 --> 00:38:22,230

it's an extensive wait a minute i just

843

00:38:20,610 --> 00:38:26,010

took to Diane space she's looking at

844

00:38:22,230 --> 00:38:29,519

your show what's a Diane oh just the

845

00:38:26,010 --> 00:38:34,440

list of stuff on on there this

846

00:38:29,519 --> 00:38:38,360

ridiculous ryky Tai Chi great how much

847

00:38:34,440 --> 00:38:43,079

money do they aren't any homeopathy

848

00:38:38,360 --> 00:38:44,550

bowen therapy aromatherapy I'll do it

849

00:38:43,079 --> 00:38:46,319

myself see the thing is they're using

850

00:38:44,550 --> 00:38:47,789

credible scientists like current Phelps

851

00:38:46,320 --> 00:38:49,769

who is an award winning scientist in

852

00:38:47,789 --> 00:38:56,489

fact she won a very important award in

853

00:38:49,769 --> 00:38:59,579

2008 yes she's a good company back

854

00:38:56,489 --> 00:39:01,979

there's a Meryl Dory one that yeah the

855

00:38:59,579 --> 00:39:04,349

researcher oh yeah she's good she's

856
00:39:01,980 --> 00:39:06,389
Australia's most respected expert on

857
00:39:04,349 --> 00:39:07,909
vaccinations didn't you know that yeah

858
00:39:06,389 --> 00:39:11,989
she said she was a

859
00:39:07,909 --> 00:39:14,420
what is the mother researcher and public

860
00:39:11,989 --> 00:39:17,358
policy advocate she has a brain that's

861
00:39:14,420 --> 00:39:19,730
all she said I mean yeah on that joy

862
00:39:17,358 --> 00:39:25,038
there are the people who are on the

863
00:39:19,730 --> 00:39:27,559
advisory committee yeah some very very

864
00:39:25,039 --> 00:39:29,869
well respected and decorated highly

865
00:39:27,559 --> 00:39:32,780
decorated scientists and the reason that

866
00:39:29,869 --> 00:39:35,780
i found this was because professor david

867
00:39:32,780 --> 00:39:37,760
Cahoon in the UK found that there's a

868
00:39:35,780 --> 00:39:41,839
guy on the scientific advisor can be a

869
00:39:37,760 --> 00:39:44,150
very best david career yes that's why we

870
00:39:41,838 --> 00:39:47,088
got in touch with me now he's actually a

871
00:39:44,150 --> 00:39:49,700
cardiologist who has it runs a private

872
00:39:47,088 --> 00:39:53,929
practice in Britain Brisbane but he's

873
00:39:49,699 --> 00:39:56,259
doing apparently coordinating over 20

874
00:39:53,929 --> 00:39:59,409
trials at the moment into things like

875
00:39:56,260 --> 00:40:01,640
lipids nutrition nutraceuticals

876
00:39:59,409 --> 00:40:04,608
psychological aspects of heart disease

877
00:40:01,639 --> 00:40:08,000
diabetes and obesity and he's running a

878
00:40:04,608 --> 00:40:10,659
trial to see at the moment if from as he

879
00:40:08,000 --> 00:40:13,699
said deliberate weight reduction reduces

880
00:40:10,659 --> 00:40:15,440
cardiovascular events now there's no

881
00:40:13,699 --> 00:40:16,730
more details about that study so I don't

882
00:40:15,440 --> 00:40:19,130
know what endpoints they're looking at I

883
00:40:16,730 --> 00:40:22,068
guess cardiovascular events would be if

884

00:40:19,130 --> 00:40:25,670
you die well okay Terrance would be any

885
00:40:22,068 --> 00:40:28,940
it could be any sort of yeah heart

886
00:40:25,670 --> 00:40:31,490
attack enjoy I with me out of here yeah

887
00:40:28,940 --> 00:40:33,470
but rachel one of the things that really

888
00:40:31,489 --> 00:40:35,959
struck me in fact there were a lot of

889
00:40:33,469 --> 00:40:39,139
things as I as I sort of tore through

890
00:40:35,960 --> 00:40:41,720
this that really concerned me ha you

891
00:40:39,139 --> 00:40:44,868
finished to Marcus baby I did you know

892
00:40:41,719 --> 00:40:48,009
me and my highlighting had a great time

893
00:40:44,869 --> 00:40:51,680
even pulled out a pen ok notes anyway um

894
00:40:48,010 --> 00:40:53,839
you know the buzzwords in health care

895
00:40:51,679 --> 00:40:55,788
these days are really important to think

896
00:40:53,838 --> 00:40:57,929
about when looking at what an

897
00:40:55,789 --> 00:41:00,030
organization like this is doing

898
00:40:57,929 --> 00:41:04,440

and one of the very first things they

899

00:41:00,030 --> 00:41:06,869

talk about is that Australia is facing

900

00:41:04,440 --> 00:41:09,030

escalating health costs and they talk

901

00:41:06,869 --> 00:41:11,130

you know you always hear in healthcare

902

00:41:09,030 --> 00:41:14,910

talking about things like aging

903

00:41:11,130 --> 00:41:16,650

populations and you know people who the

904

00:41:14,909 --> 00:41:18,980

number of people who have multiple

905

00:41:16,650 --> 00:41:21,869

comorbidities and things like that and

906

00:41:18,980 --> 00:41:23,338

it's some level I look at this and my

907

00:41:21,869 --> 00:41:25,950

alarm bells start ringing because I

908

00:41:23,338 --> 00:41:27,808

think you know are we investing money in

909

00:41:25,949 --> 00:41:31,949

this because we're trying to find cheap

910

00:41:27,809 --> 00:41:34,140

and easy ways of managing health in a

911

00:41:31,949 --> 00:41:38,219

way that we're just not able to manage

912

00:41:34,139 --> 00:41:40,889

any more and providing effectively

913
00:41:38,219 --> 00:41:42,689
placebo health care for the chronic

914
00:41:40,889 --> 00:41:45,808
illnesses which we just don't have the

915
00:41:42,690 --> 00:41:47,670
money to invest in effectively because

916
00:41:45,809 --> 00:41:49,290
that really is a huge problem primary

917
00:41:47,670 --> 00:41:52,200
health care is something that is

918
00:41:49,289 --> 00:41:55,519
completely underfunded and it is vitally

919
00:41:52,199 --> 00:42:00,419
important in you know it in terms of

920
00:41:55,519 --> 00:42:03,599
what we need to decrease the the impact

921
00:42:00,420 --> 00:42:05,369
of illness on the acute care system and

922
00:42:03,599 --> 00:42:06,869
something like this can be viewed as

923
00:42:05,369 --> 00:42:09,088
primary health care by a lot of people

924
00:42:06,869 --> 00:42:11,338
who are looking at ways to fix the

925
00:42:09,088 --> 00:42:13,500
problem and that's something I find

926
00:42:11,338 --> 00:42:17,429
really worrying that you know this type

927
00:42:13,500 --> 00:42:19,349
of therapy can be used in that way this

928
00:42:17,429 --> 00:42:22,739
kind of thing without doing anything

929
00:42:19,349 --> 00:42:25,470
practical is lending some credibility to

930
00:42:22,739 --> 00:42:27,239
these to these modalities

931
00:42:25,469 --> 00:42:29,969
yeah well I'm in one of the guys on the

932
00:42:27,239 --> 00:42:33,299
advisory committee is the the deputy

933
00:42:29,969 --> 00:42:35,399
director of em cam the NIH one so it's

934
00:42:33,300 --> 00:42:37,950
all tied up to that as well did you say

935
00:42:35,400 --> 00:42:40,369
ruchy that this is called the National

936
00:42:37,949 --> 00:42:44,598
what is the national institute of

937
00:42:40,369 --> 00:42:47,160
medicine or niccum for short become yeah

938
00:42:44,599 --> 00:42:49,380
yeah that's all she does Nick like

939
00:42:47,159 --> 00:42:51,989
million dollars I found quite

940
00:42:49,380 --> 00:42:54,990
interesting with some they talk a lot

941

00:42:51,989 --> 00:42:59,539
about the things that we value in

942
00:42:54,989 --> 00:43:01,709
science about you know rigorous research

943
00:42:59,539 --> 00:43:03,029
rigorous methodologies all all the

944
00:43:01,710 --> 00:43:04,980
things that we talk about but then they

945
00:43:03,030 --> 00:43:10,740
in terms of their research priorities

946
00:43:04,980 --> 00:43:12,659
they say the priorities are research

947
00:43:10,739 --> 00:43:14,879
that investigates methodological issues

948
00:43:12,659 --> 00:43:16,799
relevant to the complex complex nature

949
00:43:14,880 --> 00:43:18,690
of complementary medicine including

950
00:43:16,800 --> 00:43:20,609
development of methodological tools

951
00:43:18,690 --> 00:43:22,019
which may impact on our understanding of

952
00:43:20,608 --> 00:43:23,969
the whole practice concepts and

953
00:43:22,019 --> 00:43:26,969
mechanisms underpinning complementary

954
00:43:23,969 --> 00:43:28,679
medicine now I understand that in terms

955
00:43:26,969 --> 00:43:30,480

of you know doing research into any

956

00:43:28,679 --> 00:43:32,190

modality that yes you do have to develop

957

00:43:30,480 --> 00:43:33,929

measurement tools and things like that

958

00:43:32,190 --> 00:43:38,849

that are appropriate for that particular

959

00:43:33,929 --> 00:43:41,069

thing but that also says to me it's that

960

00:43:38,849 --> 00:43:42,450

whole idea that people involved in this

961

00:43:41,070 --> 00:43:44,280

kind of thing talk about that somehow

962

00:43:42,449 --> 00:43:46,829

complementary medicine can't be

963

00:43:44,280 --> 00:43:48,980

investigated in using the same science

964

00:43:46,829 --> 00:43:51,659

as other medicine because it does

965

00:43:48,980 --> 00:43:53,969

exactly and there and so it sort of you

966

00:43:51,659 --> 00:43:56,879

know are we looking at a way to invent a

967

00:43:53,969 --> 00:44:00,980

whole new science to give to open doors

968

00:43:56,880 --> 00:44:00,980

for this rather than you know

969

00:44:01,608 --> 00:44:05,909

tell me you only need special signs when

970
00:44:04,380 --> 00:44:08,309
the real regular science doesn't work

971
00:44:05,909 --> 00:44:10,440
yeah yeah they're more than happy to

972
00:44:08,309 --> 00:44:10,829
adopt the results when they release the

973
00:44:10,440 --> 00:44:12,780
nice

974
00:44:10,829 --> 00:44:15,630
any results is there anything that has

975
00:44:12,780 --> 00:44:18,360
come out of it I didn't actually have a

976
00:44:15,630 --> 00:44:20,610
charge to look annoying that I would be

977
00:44:18,360 --> 00:44:22,530
interesting yet to continue and say what

978
00:44:20,610 --> 00:44:24,210
have you come up with so yeah yeah yeah

979
00:44:22,530 --> 00:44:27,269
I don't I don't remember if there was it

980
00:44:24,210 --> 00:44:28,679
to have I remember there was one tab

981
00:44:27,269 --> 00:44:31,619
that was completely blank but I don't

982
00:44:28,679 --> 00:44:35,159
remember where it was I mean I'm deny

983
00:44:31,619 --> 00:44:36,719
that was the pond yeah the other day I

984
00:44:35,159 --> 00:44:39,239
have to say that gave me a little bit of

985
00:44:36,719 --> 00:44:41,250
a chuckle it was a bit of her ha moment

986
00:44:39,239 --> 00:44:42,629
was um I don't know if you actually

987
00:44:41,250 --> 00:44:44,639
looked at their definition of

988
00:44:42,630 --> 00:44:46,289
complementary medicine but they give a

989
00:44:44,639 --> 00:44:48,359
definition of complementary and a

990
00:44:46,289 --> 00:44:51,029
definition of medicine and their

991
00:44:48,360 --> 00:44:52,860
definition of opportunities sure well

992
00:44:51,030 --> 00:44:55,500
their definition of complementary is

993
00:44:52,860 --> 00:45:01,680
forming a complete or balanced whole oh

994
00:44:55,500 --> 00:45:03,480
good now I'm sorry I check that's not

995
00:45:01,679 --> 00:45:06,419
why I create a completely balanced all

996
00:45:03,480 --> 00:45:07,590
using bullet thanks cuz you know what I

997
00:45:06,420 --> 00:45:09,420
probably pretty cool you know what I

998

00:45:07,590 --> 00:45:12,660
also think is interesting about this Joe

999
00:45:09,420 --> 00:45:14,730
is they have stayed away from using the

1000
00:45:12,659 --> 00:45:16,559
term alternative they have and I'm

1001
00:45:14,730 --> 00:45:17,639
pretty sure that's deliberately so

1002
00:45:16,559 --> 00:45:19,170
they've just called themselves the

1003
00:45:17,639 --> 00:45:21,599
National Institute of complementary

1004
00:45:19,170 --> 00:45:24,510
medicine which means our modalities will

1005
00:45:21,599 --> 00:45:26,460
complement conventional medicine will

1006
00:45:24,510 --> 00:45:29,370
give conventional medicine a little help

1007
00:45:26,460 --> 00:45:30,599
yeah yeah but but they do I mean if you

1008
00:45:29,369 --> 00:45:31,920
read through their stuff every now and

1009
00:45:30,599 --> 00:45:33,569
then you'll find a you know they've

1010
00:45:31,920 --> 00:45:36,240
dropped one like here they've got

1011
00:45:33,570 --> 00:45:37,769
wellness promotion yeah yeah so you know

1012
00:45:36,239 --> 00:45:41,369

they go from all this very scientific

1013

00:45:37,769 --> 00:45:42,900

terminology into we're going to you

1014

00:45:41,369 --> 00:45:45,509

insinuating that wellness is not a

1015

00:45:42,900 --> 00:45:47,240

saleable turn yes I am but but this

1016

00:45:45,510 --> 00:45:50,640

sentence so they want to facilitate

1017

00:45:47,239 --> 00:45:53,069

discussion and and do preliminary work

1018

00:45:50,639 --> 00:45:55,049

to complete much as possible in the

1019

00:45:53,070 --> 00:45:57,870

areas of cancer cardiovascular disease

1020

00:45:55,050 --> 00:46:01,200

diabetes neurological disorders brackets

1021

00:45:57,869 --> 00:46:03,779

dimensions and wellness promotion that's

1022

00:46:01,199 --> 00:46:06,839

like that there's a company advertising

1023

00:46:03,780 --> 00:46:10,500

on TV and some sort of pill that will

1024

00:46:06,840 --> 00:46:12,559

give you back the zest gosh take this

1025

00:46:10,500 --> 00:46:15,210

pill and you'll have more zest right

1026

00:46:12,559 --> 00:46:17,670

it's your scientific testing you

1027
00:46:15,210 --> 00:46:19,260
now i don't know i saw this page which

1028
00:46:17,670 --> 00:46:23,670
was their page of facts and statistics

1029
00:46:19,260 --> 00:46:26,910
and i was really amused by this one so

1030
00:46:23,670 --> 00:46:28,740
they say here that too in three

1031
00:46:26,909 --> 00:46:31,139
australians use complementary medicine

1032
00:46:28,739 --> 00:46:33,358
each year and they then say that almost

1033
00:46:31,139 --> 00:46:35,670
four times more spent on complementary

1034
00:46:33,358 --> 00:46:39,239
medicine than on pharmaceuticals now

1035
00:46:35,670 --> 00:46:43,380
yeah in the brackets they also say in

1036
00:46:39,239 --> 00:46:45,299
out-of-pocket expenses now I mean

1037
00:46:43,380 --> 00:46:48,088
obviously that's because you've got the

1038
00:46:45,300 --> 00:46:51,060
PBS you've got ya drugs are drugs that I

1039
00:46:48,088 --> 00:46:52,679
can cover by the government en exactly

1040
00:46:51,059 --> 00:46:55,588
but you know what they'll cover in

1041
00:46:52,679 --> 00:46:57,419
complementary medicine nope I go along

1042
00:46:55,588 --> 00:46:59,969
every now and then have a nice time

1043
00:46:57,420 --> 00:47:02,220
massage down down the road and I bet

1044
00:46:59,969 --> 00:47:04,079
they would say did you have a mess a

1045
00:47:02,219 --> 00:47:05,639
year okay you use complementary medicine

1046
00:47:04,079 --> 00:47:07,710
well the thing is though that they've

1047
00:47:05,639 --> 00:47:10,679
cited these statistics there isn't a

1048
00:47:07,710 --> 00:47:12,210
single source for any of them I don't

1049
00:47:10,679 --> 00:47:14,879
know where they got this data from they

1050
00:47:12,210 --> 00:47:17,369
say that you know complementary medicine

1051
00:47:14,880 --> 00:47:19,440
users have healthier lifestyles and

1052
00:47:17,369 --> 00:47:21,119
seventy-three percent have you no

1053
00:47:19,440 --> 00:47:23,250
minimum serves of fruit and vegetables

1054
00:47:21,119 --> 00:47:25,108
is opposed you know for toys money uncle

1055

00:47:23,250 --> 00:47:27,389
exactly we know that people who know

1056
00:47:25,108 --> 00:47:29,309
that about the people who use it so you

1057
00:47:27,389 --> 00:47:31,368
know but but they don't source any of us

1058
00:47:29,309 --> 00:47:34,980
and and I think that you know it's

1059
00:47:31,369 --> 00:47:37,769
anyway so yeah there are they're looking

1060
00:47:34,980 --> 00:47:38,670
for for data their whole idea is to

1061
00:47:37,769 --> 00:47:40,019
liquidate up and they're not even

1062
00:47:38,670 --> 00:47:42,599
providing evidence for their own

1063
00:47:40,019 --> 00:47:44,429
statistics which I find quite far

1064
00:47:42,599 --> 00:47:48,480
there's money in them that are

1065
00:47:44,429 --> 00:47:50,460
complementary medicine so any of our

1066
00:47:48,480 --> 00:47:53,039
listeners who somebody actually tweeted

1067
00:47:50,460 --> 00:47:54,329
back to me last night that they study on

1068
00:47:53,039 --> 00:47:57,059
that campus and they didn't know it

1069
00:47:54,329 --> 00:47:58,889

exists so if you anyone who's I'm

1070

00:47:57,059 --> 00:48:01,829

studying at uws and actually Rachel

1071

00:47:58,889 --> 00:48:04,019

Welsh who listens to the show go check

1072

00:48:01,829 --> 00:48:07,559

it out and tell us what's going on in

1073

00:48:04,019 --> 00:48:09,329

the bunkers of that nikam that's

1074

00:48:07,559 --> 00:48:11,369

something actually I just you know with

1075

00:48:09,329 --> 00:48:15,598

the fact that uws is the university that

1076

00:48:11,369 --> 00:48:16,980

is a lie aligned to this uws is one of

1077

00:48:15,599 --> 00:48:20,250

the universities in Australia that

1078

00:48:16,980 --> 00:48:22,860

carries a large number of the degree

1079

00:48:20,250 --> 00:48:25,440

courses in things like Chinese medicine

1080

00:48:22,860 --> 00:48:32,970

I mean various modules naturopathy but

1081

00:48:25,440 --> 00:48:34,650

in a lot of these practices so another

1082

00:48:32,969 --> 00:48:37,289

mention by me quickly don't forget

1083

00:48:34,650 --> 00:48:40,889

listeners that you can hear the skeptics

1084
00:48:37,289 --> 00:48:42,929
dr. H II myself dr. Chrissy and anybody

1085
00:48:40,889 --> 00:48:44,429
else Joe I hope you'll be fronting along

1086
00:48:42,929 --> 00:48:49,440
soon around you're always welcome on

1087
00:48:44,429 --> 00:48:51,809
radio 2 GB here in Sydney that's 873 on

1088
00:48:49,440 --> 00:48:53,610
the am dial usually every second

1089
00:48:51,809 --> 00:48:54,869
saturday or so but we certainly let you

1090
00:48:53,610 --> 00:48:58,170
know via twitter when that's happening

1091
00:48:54,869 --> 00:49:01,679
without good friend Glenn wheeler and of

1092
00:48:58,170 --> 00:49:05,340
course around and on sunday this Sunday

1093
00:49:01,679 --> 00:49:08,730
ninth of mayor 845 Sydney time I will be

1094
00:49:05,340 --> 00:49:11,730
on radio national speaking on the

1095
00:49:08,730 --> 00:49:14,519
program named Occam's razor and if it's

1096
00:49:11,730 --> 00:49:16,349
about assessing evidence ok and if

1097
00:49:14,519 --> 00:49:18,869
listeners don't happen charlie if they

1098
00:49:16,349 --> 00:49:21,389
can't of course if they can tune in or

1099
00:49:18,869 --> 00:49:24,480
if they're out of area for for this

1100
00:49:21,389 --> 00:49:28,739
radio station they can download it later

1101
00:49:24,480 --> 00:49:32,730
that morning from ABC dotnet dotter you

1102
00:49:28,739 --> 00:49:34,409
radio national's website and through

1103
00:49:32,730 --> 00:49:36,630
itunes yes and what you don't have

1104
00:49:34,409 --> 00:49:41,639
service is ask where they can get the

1105
00:49:36,630 --> 00:49:44,940
podcasts of our 2gb show have you a mail

1106
00:49:41,639 --> 00:49:47,339
going to them so yeah we we usually not

1107
00:49:44,940 --> 00:49:49,320
always we usually get to record our when

1108
00:49:47,340 --> 00:49:51,090
we're on to GV i've got about four or

1109
00:49:49,320 --> 00:49:53,550
five of them kicking around my computer

1110
00:49:51,090 --> 00:49:55,980
we put one or two up online but

1111
00:49:53,550 --> 00:49:58,460
generally speaking they're not really

1112

00:49:55,980 --> 00:49:58,460
anywhere

1113
00:49:58,670 --> 00:50:04,670
you can hear them anywhere in the world

1114
00:50:01,130 --> 00:50:06,110
while we're doing them on 2gb com yeah

1115
00:50:04,670 --> 00:50:09,230
but that wasn't my question I know I

1116
00:50:06,110 --> 00:50:12,019
know well if we get enough people

1117
00:50:09,230 --> 00:50:13,400
requesting it maybe we can call I can

1118
00:50:12,019 --> 00:50:17,780
clay what we have to make them available

1119
00:50:13,400 --> 00:50:21,579
ok so you so yes Joe I'm sure you'll

1120
00:50:17,780 --> 00:50:24,230
have to phone up and beyond and that

1121
00:50:21,579 --> 00:50:27,170
that radio program we're on is actually

1122
00:50:24,230 --> 00:50:30,349
about to go semi national yeah it soft

1123
00:50:27,170 --> 00:50:33,260
it's gonna be real sin decatur through

1124
00:50:30,349 --> 00:50:35,389
Melbourne so that's pretty cool I have

1125
00:50:33,260 --> 00:50:37,220
another announcement I we need the

1126
00:50:35,389 --> 00:50:39,440

announcement stage now so let you know

1127

00:50:37,219 --> 00:50:43,449

something so I'd like to a now on i'ma

1128

00:50:39,440 --> 00:50:46,700

get on thurs nouncement anybody else on

1129

00:50:43,449 --> 00:50:51,049

Thursday the 13th of may I will be

1130

00:50:46,699 --> 00:50:53,719

speaking to Canberra skeptics ah will I

1131

00:50:51,050 --> 00:50:58,039

be listening I wonder I'm sure some of

1132

00:50:53,719 --> 00:51:00,469

them will be it's at six I think 6pm 47

1133

00:50:58,039 --> 00:51:02,599

p.m. starts so there's like dinner and

1134

00:51:00,469 --> 00:51:04,759

stuff and then the talk is at seven pm

1135

00:51:02,599 --> 00:51:07,130

and it's at the lecture theatre then of

1136

00:51:04,760 --> 00:51:10,730

innovations building eggleston road and

1137

00:51:07,130 --> 00:51:12,559

you but what was that date again if the

1138

00:51:10,730 --> 00:51:14,900

13th of May thirteenth amade the

1139

00:51:12,559 --> 00:51:17,179

Canberra skeptics listeners in that area

1140

00:51:14,900 --> 00:51:20,000

go along and you can he run guineas

1141
00:51:17,179 --> 00:51:21,409
autograph for who Google Canberra

1142
00:51:20,000 --> 00:51:26,179
skeptics and you can find out more i'm

1143
00:51:21,409 --> 00:51:28,940
sure and Ron I think we've got some tam

1144
00:51:26,179 --> 00:51:31,009
Australian use as well as we do we have

1145
00:51:28,940 --> 00:51:33,289
two speakers that we're going to add to

1146
00:51:31,010 --> 00:51:35,720
the list of advertisers because we've

1147
00:51:33,289 --> 00:51:38,119
got more exciting guests yeah the list

1148
00:51:35,719 --> 00:51:41,329
but we can announce that two of our

1149
00:51:38,119 --> 00:51:43,299
friends here the skeptic sound will be

1150
00:51:41,329 --> 00:51:48,130
participating will be able speaker Oh

1151
00:51:43,300 --> 00:51:48,130
dr. AG and dr. Chrissy both

1152
00:51:48,699 --> 00:51:53,089
so dr. h er that's very exciting you're

1153
00:51:51,889 --> 00:51:54,859
gonna be one of the speakers of

1154
00:51:53,090 --> 00:51:59,329
chemistry it is very exciting i'm very

1155
00:51:54,860 --> 00:52:01,309
excited yeah you on an a380 oh that

1156
00:51:59,329 --> 00:52:04,219
would be that would be cool that would

1157
00:52:01,309 --> 00:52:05,360
be cool if you can arrange that even if

1158
00:52:04,219 --> 00:52:07,399
you have to go around the world first

1159
00:52:05,360 --> 00:52:08,809
that's fine no see I don't mind all

1160
00:52:07,400 --> 00:52:13,010
right yeah pretty good to land right

1161
00:52:08,809 --> 00:52:16,869
outside the smc center I know they can

1162
00:52:13,010 --> 00:52:22,970
exchange it that's like pin number oh

1163
00:52:16,869 --> 00:52:26,420
god you pity me now Tommy however we are

1164
00:52:22,969 --> 00:52:28,489
on we are working very hard on details

1165
00:52:26,420 --> 00:52:29,869
for Tamara Australia and hopefully

1166
00:52:28,489 --> 00:52:32,359
before too long we should be able to

1167
00:52:29,869 --> 00:52:34,940
direct people to a permanent website yes

1168
00:52:32,360 --> 00:52:38,329
that's coming soon coming it's coming

1169

00:52:34,940 --> 00:52:40,880
also we will be keep your eyes and ears

1170
00:52:38,329 --> 00:52:44,590
and everything else open for well not

1171
00:52:40,880 --> 00:52:47,570
quite everything else senses only sense

1172
00:52:44,590 --> 00:52:50,180
open for news about when we will be

1173
00:52:47,570 --> 00:52:56,000
selling tickets because it's coming it's

1174
00:52:50,179 --> 00:53:00,769
coming soon yeah I'll be lining up for

1175
00:52:56,000 --> 00:53:03,199
the food it won't food for the noms and

1176
00:53:00,769 --> 00:53:06,650
so let me swing the microphone around

1177
00:53:03,199 --> 00:53:09,199
again now you'll appreciate this this

1178
00:53:06,650 --> 00:53:10,849
lazy susan a boy it's got the microphone

1179
00:53:09,199 --> 00:53:13,129
sitting on it so if i swing it around

1180
00:53:10,849 --> 00:53:14,839
its facing you Joe ah like I suppose

1181
00:53:13,130 --> 00:53:17,059
every one of my favorite bands actually

1182
00:53:14,840 --> 00:53:19,780
they're really good Sydney bad if I

1183
00:53:17,059 --> 00:53:26,179

wonder if farmers know what a lazy susan

1184

00:53:19,780 --> 00:53:27,680

dog google says in Australian time for

1185

00:53:26,179 --> 00:53:30,710

some reason the girls are cracking up

1186

00:53:27,679 --> 00:53:34,730

presently the lazy susan of you go go

1187

00:53:30,710 --> 00:53:36,409

ahead Joe oh so I'm I got an iphone

1188

00:53:34,730 --> 00:53:39,619

recently so I've been exploring the

1189

00:53:36,409 --> 00:53:42,199

world of apps and for that farm there's

1190

00:53:39,619 --> 00:53:45,019

enough of that is in there so apparently

1191

00:53:42,199 --> 00:53:48,349

I've just discovered today that all have

1192

00:53:45,019 --> 00:53:53,269

apparently booted an STD psychic healing

1193

00:53:48,349 --> 00:53:56,480

app off their list of apps really indeed

1194

00:53:53,269 --> 00:53:58,400

I hear you say um according to this

1195

00:53:56,480 --> 00:54:01,309

little piece i found online

1196

00:53:58,400 --> 00:54:02,950

ah Apple has decided that psychic

1197

00:54:01,309 --> 00:54:05,450

healing has no place in the app store

1198
00:54:02,949 --> 00:54:08,328
despite last week approving a distance

1199
00:54:05,449 --> 00:54:13,068
healing application for warts what for

1200
00:54:08,329 --> 00:54:15,380
1299 apparently people who voted my palm

1201
00:54:13,068 --> 00:54:19,788
people who bought a copy of what healer

1202
00:54:15,380 --> 00:54:22,579
were asked to take well as to take a

1203
00:54:19,789 --> 00:54:25,278
photograph of their water we just sent

1204
00:54:22,579 --> 00:54:28,160
to the professional mental healer who

1205
00:54:25,278 --> 00:54:31,309
spends the next and i quote a hundred

1206
00:54:28,159 --> 00:54:34,308
and eleven days thinking about it after

1207
00:54:31,309 --> 00:54:36,079
all worst effects are visible it was

1208
00:54:34,309 --> 00:54:38,990
approved on the twenty-second of april

1209
00:54:36,079 --> 00:54:41,650
but was pulled this week by apple what

1210
00:54:38,989 --> 00:54:44,568
if he walked in a personal place oh

1211
00:54:41,650 --> 00:54:49,160
that's what do you hope will find out

1212
00:54:44,568 --> 00:54:54,380
embarrassing illness that's your

1213
00:54:49,159 --> 00:54:58,879
favorite show it's actually probably a

1214
00:54:54,380 --> 00:55:00,608
bit of a a bit of a forge oh please you

1215
00:54:58,880 --> 00:55:02,539
know depends because of his job

1216
00:55:00,608 --> 00:55:05,769
embarrassing illnesses is kind of a

1217
00:55:02,539 --> 00:55:09,289
reach of every bit of a relief no

1218
00:55:05,769 --> 00:55:10,880
respite it's a restaurant but anyway I

1219
00:55:09,289 --> 00:55:12,589
found a rather amusing that Apple had

1220
00:55:10,880 --> 00:55:14,809
chosen to get rid of this given the fact

1221
00:55:12,588 --> 00:55:16,969
that in fact there are many apps out

1222
00:55:14,809 --> 00:55:19,730
there within the health and medical

1223
00:55:16,969 --> 00:55:22,699
section which are entirely quackery I'm

1224
00:55:19,730 --> 00:55:24,740
gonna hold me up homeopathic I've got an

1225
00:55:22,699 --> 00:55:26,568
astrology oh yeah apparently there's a

1226

00:55:24,739 --> 00:55:30,219
crystal healing Bowl to excite your

1227
00:55:26,568 --> 00:55:34,519
chakra sorry your check was excited

1228
00:55:30,219 --> 00:55:37,699
they're vibrating hey I my chakra so

1229
00:55:34,519 --> 00:55:43,130
excited too mmm because Andrew

1230
00:55:37,699 --> 00:55:45,858
Wakefield's written a book run for the

1231
00:55:43,130 --> 00:55:47,450
Union now somebody on Twitter today said

1232
00:55:45,858 --> 00:55:49,219
that they were really pleased to see

1233
00:55:47,449 --> 00:55:52,219
this because he's always been very good

1234
00:55:49,219 --> 00:55:54,019
at fiction or something and it says his

1235
00:55:52,219 --> 00:55:55,399
first foray into fiction it's actually

1236
00:55:54,019 --> 00:55:58,009
not published yet but it's called

1237
00:55:55,400 --> 00:56:01,099
callous disregard and it's the story of

1238
00:55:58,010 --> 00:56:01,970
his you know about callous downfall I

1239
00:56:01,099 --> 00:56:03,650
guess

1240
00:56:01,969 --> 00:56:08,089

he doesn't forward and actually gives

1241
00:56:03,650 --> 00:56:10,369
the end away I didn't know that I know

1242
00:56:08,090 --> 00:56:14,000
that she did the forward but the ship

1243
00:56:10,369 --> 00:56:24,640
sing does she what do you mean she gives

1244
00:56:14,000 --> 00:56:24,639
the end away because it's Jenny McCarthy

1245
00:56:32,800 --> 00:56:55,490
to go red go purple no I'm sorry I'm a

1246
00:56:51,590 --> 00:56:56,750
bit slow but I get it now um yes I it's

1247
00:56:55,489 --> 00:57:00,618
I don't know when it's you know what

1248
00:56:56,750 --> 00:57:04,730
it's related not sure yeah back oh you

1249
00:57:00,619 --> 00:57:06,200
might be scary so will it my way we look

1250
00:57:04,730 --> 00:57:10,099
forward to reading his side of the story

1251
00:57:06,199 --> 00:57:12,098
yes oh I'll get it you've still got my

1252
00:57:10,099 --> 00:57:17,630
Jenny McCarthy book have you read it yet

1253
00:57:12,099 --> 00:57:20,450
yes and it was terrible what do you

1254
00:57:17,630 --> 00:57:22,519
learn to read it no oh well I bought

1255
00:57:20,449 --> 00:57:23,989
that one that I lent you for five

1256
00:57:22,519 --> 00:57:26,269
dollars in the bargain bin in new york

1257
00:57:23,989 --> 00:57:28,039
city so i'll probably wait for weight

1258
00:57:26,269 --> 00:57:30,559
feels to appear in the bargain bin DC

1259
00:57:28,039 --> 00:57:33,019
absolutely trained here yeah y'all wait

1260
00:57:30,559 --> 00:57:36,049
a whole week we get I give you you know

1261
00:57:33,019 --> 00:57:38,030
nice auntie roo books you throw at us

1262
00:57:36,050 --> 00:57:41,170
things like France Sheffield homeopathy

1263
00:57:38,030 --> 00:57:45,170
plus dvds and Jenny McCarthy's book

1264
00:57:41,170 --> 00:57:47,720
you're trying to torture us don't forget

1265
00:57:45,170 --> 00:57:51,050
second opinion oh that's the worst thing

1266
00:57:47,719 --> 00:57:53,239
out of it all right I you know one day I

1267
00:57:51,050 --> 00:57:57,050
think we should live stream this think

1268
00:57:53,239 --> 00:57:59,279
tank on a video de know then people can

1269
00:57:57,050 --> 00:58:02,130
see what colors you're turning diet

1270
00:57:59,280 --> 00:58:03,690
I can see you Rachel and joe kept them

1271
00:58:02,130 --> 00:58:06,210
so silly and nearly fall off their

1272
00:58:03,690 --> 00:58:08,550
chairs there's just one problem with

1273
00:58:06,210 --> 00:58:14,190
that idea what Sam you can't edit live

1274
00:58:08,550 --> 00:58:18,240
streams no better not and a big apology

1275
00:58:14,190 --> 00:58:21,750
it seems the club has led us down no bus

1276
00:58:18,239 --> 00:58:24,809
announcements this week and we can work

1277
00:58:21,750 --> 00:58:27,840
in a con make one reject on yep first

1278
00:58:24,809 --> 00:58:30,420
announcement widget members and guests

1279
00:58:27,840 --> 00:58:33,390
let's first to Houston town and family

1280
00:58:30,420 --> 00:58:35,730
will be leaving in five minutes very

1281
00:58:33,389 --> 00:58:37,349
good nobody photo is now if you leave

1282
00:58:35,730 --> 00:58:41,550
that in yeah well with thing that that's

1283

00:58:37,349 --> 00:58:43,110
that's always eager I'm now mrs. on Iran

1284
00:58:41,550 --> 00:58:44,789
so Jeff thank you so much for making

1285
00:58:43,110 --> 00:58:47,550
your way all the way over here for the

1286
00:58:44,789 --> 00:58:49,650
thing tank again curated Diane thank you

1287
00:58:47,550 --> 00:58:52,289
thank you no problem widget that's good

1288
00:58:49,650 --> 00:58:54,530
you say that and got uh haughtily bunker

1289
00:58:52,289 --> 00:58:59,429
I'll Spain I'm here hon music today oh

1290
00:58:54,530 --> 00:59:01,860
you said a gangsta bread coffee are you

1291
00:58:59,429 --> 00:59:03,429
finished off in room how can you save

1292
00:59:01,860 --> 00:59:08,740
every night

1293
00:59:03,429 --> 00:59:11,949
then you climb at Oyster venue clav my

1294
00:59:08,739 --> 00:59:24,689
twister 17 please are you have you

1295
00:59:11,949 --> 00:59:28,299
finished coffee I believe that in

1296
00:59:24,690 --> 00:59:29,889
Spokane if you're not gonna happen thank

1297
00:59:28,300 --> 00:59:32,710

you for coming over thank every way

1298

00:59:29,889 --> 00:59:35,230

across the bridge mm-hmm indeed as usual

1299

00:59:32,710 --> 00:59:37,630

as usual and dr. heo post thank you so

1300

00:59:35,230 --> 00:59:41,380

much for coming on oh thanks i'm

1301

00:59:37,630 --> 00:59:43,150

twittering I wasn't listening you see

1302

00:59:41,380 --> 00:59:47,380

why you can't do this alone you can't do

1303

00:59:43,150 --> 00:59:48,910

this in a podcast goodness me she must

1304

00:59:47,380 --> 00:59:54,760

have read she must have read a funny

1305

00:59:48,909 --> 00:59:56,710

twitter and and you've been a very

1306

00:59:54,760 --> 00:59:58,569

probably just point out that came out of

1307

00:59:56,710 --> 01:00:01,000

the mouth it did you've been a very

1308

00:59:58,568 --> 01:00:08,579

patient audience my friend is so until

1309

01:00:01,000 --> 01:00:08,579

the next thing to paint come back

1310

01:00:31,170 --> 01:00:35,730

you

1311

01:00:32,909 --> 01:00:38,579

this is Eugenie Scott National Center

1312
01:00:35,730 --> 01:00:44,010
for Science Education you can find us at

1313
01:00:38,579 --> 01:00:45,929
ww.ncsc.com come see us if you want to

1314
01:00:44,010 --> 01:00:48,150
know anything about the creationism and

1315
01:00:45,929 --> 01:00:51,179
evolution conflict in the United States

1316
01:00:48,150 --> 01:00:52,950
or more's the pity internationally these

1317
01:00:51,179 --> 01:00:56,219
days we are a clearinghouse for

1318
01:00:52,949 --> 01:00:58,889
information on this vexing but certainly

1319
01:00:56,219 --> 01:01:01,309
very interesting problem come and find

1320
01:00:58,889 --> 01:01:01,309
out more about

1321
01:01:14,920 --> 01:01:20,619
thank you for listening to the skeptic

1322
01:01:17,619 --> 01:01:22,298
zone and once again thank you for

1323
01:01:20,619 --> 01:01:24,130
everybody who's writing in letting me

1324
01:01:22,298 --> 01:01:26,798
know what you're doing while listening

1325
01:01:24,130 --> 01:01:31,059
to the skeptic zone a lot of people are

1326
01:01:26,798 --> 01:01:32,829
driving at the moment yeah take care you

1327
01:01:31,059 --> 01:01:35,130
might run into people who are listening

1328
01:01:32,829 --> 01:01:37,809
to us on their iPods is there jogging

1329
01:01:35,130 --> 01:01:40,869
wouldn't that be something and a special

1330
01:01:37,809 --> 01:01:44,380
a special shout out to all those people

1331
01:01:40,869 --> 01:01:47,289
who can't sleep right now sitting up in

1332
01:01:44,380 --> 01:01:49,630
bed sitting on your couch eyes wide open

1333
01:01:47,289 --> 01:01:53,369
wishing you could sleep battling

1334
01:01:49,630 --> 01:01:59,680
insomnia but listening to us instead I

1335
01:01:53,369 --> 01:02:06,670
hope we send you to sleep at all next

1336
01:01:59,679 --> 01:02:13,419
week if you Richard sword is signing off

1337
01:02:06,670 --> 01:02:15,760
from Sydney Australia you've been

1338
01:02:13,420 --> 01:02:20,260
listening to the skeptic zone visit our

1339
01:02:15,760 --> 01:02:24,990
website at www.skeptics.com on TV for

1340

01:02:20,260 --> 01:02:28,640
comments contacts an extra video reports

1341
01:02:24,989 --> 01:02:28,639
I skin

1342
01:02:30,059 --> 01:02:32,779
check

1343
01:02:43,980 --> 01:02:46,039
you