

1
00:00:00,000 --> 00:00:06,889
ready in here and see what happens when

2
00:00:03,480 --> 00:00:10,679
we stimulate this one acupuncture point

3
00:00:06,889 --> 00:00:12,870
this is not to scale but the time is to

4
00:00:10,679 --> 00:00:14,669
scale so what happens is that I'm going

5
00:00:12,869 --> 00:00:16,259
to stimulate this acupuncture point

6
00:00:14,669 --> 00:00:18,089
here's what the accurate points are

7
00:00:16,260 --> 00:00:19,679
points acupuncture points look like

8
00:00:18,089 --> 00:00:21,689
along the Meridian you can see there are

9
00:00:19,679 --> 00:00:23,670
different sizes and I'm going to

10
00:00:21,689 --> 00:00:26,579
stimulate this particular acupuncture

11
00:00:23,670 --> 00:00:29,060
point down here and let's see what

12
00:00:26,579 --> 00:00:29,059
happens

13
00:00:29,839 --> 00:00:35,429
okay we've stimulated that acupuncture

14
00:00:32,368 --> 00:00:37,710
point and now the information at that

15
00:00:35,429 --> 00:00:39,988
stimulation is moving on Meridian and

16
00:00:37,710 --> 00:00:42,780
now stimulates this acupuncture point

17
00:00:39,988 --> 00:00:44,788
the information continues to move along

18
00:00:42,780 --> 00:00:48,149
the Meridian smoothing actually about

19
00:00:44,789 --> 00:00:50,640
five to ten centimeters per second it's

20
00:00:48,149 --> 00:00:52,350
a very slow moving signal along the

21
00:00:50,640 --> 00:00:55,558
Meridian continues on this points a

22
00:00:52,350 --> 00:00:58,320
little further along and now this

23
00:00:55,558 --> 00:01:00,808
acupuncture point is even further away

24
00:00:58,320 --> 00:01:02,579
along the same Meridian takes it a

25
00:01:00,808 --> 00:01:05,688
little bit longer to get there that the

26
00:01:02,579 --> 00:01:10,460
time here is correct though and

27
00:01:05,688 --> 00:01:10,459
eventually it's gets stimulated as well

28
00:01:11,030 --> 00:01:16,430
so we've produced a real-time images of

29

00:01:14,849 --> 00:01:18,688
acupuncture points during simulation

30
00:01:16,430 --> 00:01:20,670
although the data is collected during

31
00:01:18,688 --> 00:01:23,219
heal time reduce the images that you see

32
00:01:20,670 --> 00:01:25,439
later when stimulated the acupuncture

33
00:01:23,219 --> 00:01:28,469
twists itself around the needle the

34
00:01:25,438 --> 00:01:30,179
simulation process is communicated to

35
00:01:28,469 --> 00:01:32,158
other acupoints along the same Meridian

36
00:01:30,180 --> 00:01:33,509
it speeds depends upon the individual

37
00:01:32,159 --> 00:01:36,630
but it goes from five to ten centimeters

38
00:01:33,509 --> 00:01:38,549
per second it turns out that a number of

39
00:01:36,629 --> 00:01:41,129
the subjects that we've used are very

40
00:01:38,549 --> 00:01:43,710
very sensitive to this process or the

41
00:01:41,129 --> 00:01:46,228
flow of Chi and their description of the

42
00:01:43,709 --> 00:01:48,750
flow of Chi up their leg of energy is

43
00:01:46,228 --> 00:01:52,109

precisely what we measure and the right

44

00:01:48,750 --> 00:01:53,188
that we measure obviously

45

00:01:52,109 --> 00:01:54,840
well maybe not obviously but the

46

00:01:53,188 --> 00:01:57,389
mechanisms or the nature of the

47

00:01:54,840 --> 00:01:59,670
communication process is certainly

48

00:01:57,390 --> 00:02:02,430
unknown and something we are trying to

49

00:01:59,670 --> 00:02:06,629
investigate at this point in time now

50

00:02:02,430 --> 00:02:08,879
we're using fMRI to produce signals from

51

00:02:06,629 --> 00:02:10,889
acupuncture stimulation and as I

52

00:02:08,878 --> 00:02:12,269
indicated earlier the classical fMRI

53

00:02:10,889 --> 00:02:13,709
study is to

54

00:02:12,270 --> 00:02:15,330
the time between flashing lights and

55

00:02:13,710 --> 00:02:16,080
brain activity which takes about a

56

00:02:15,330 --> 00:02:18,750
hundred and eighty two hundred

57

00:02:16,080 --> 00:02:20,370
milliseconds but we actually let's use

58
00:02:18,750 --> 00:02:22,319
ultrasound actually stimulate the

59
00:02:20,370 --> 00:02:24,300
acupuncture point because it allows us

60
00:02:22,319 --> 00:02:26,389
to make precise measurements of time

61
00:02:24,300 --> 00:02:29,610
between stimulation and brain activity

62
00:02:26,389 --> 00:02:31,109
it turns out that when you do this and

63
00:02:29,610 --> 00:02:33,120
you begin looking at what happens in the

64
00:02:31,110 --> 00:02:35,340
visual cortex of the brain you see a

65
00:02:33,120 --> 00:02:37,469
signal that appears to be there almost

66
00:02:35,340 --> 00:02:39,420
instantaneously less than or equal to

67
00:02:37,469 --> 00:02:41,129
about eight tenths of a millisecond this

68
00:02:39,419 --> 00:02:43,379
is actually two orders of magnitude

69
00:02:41,129 --> 00:02:44,879
faster than any known process which

70
00:02:43,379 --> 00:02:47,039
actually drives my neuroscience

71
00:02:44,879 --> 00:02:48,299
colleagues absolutely nuts but if you

72
00:02:47,039 --> 00:02:50,969
turns out if you stimulate an

73
00:02:48,300 --> 00:02:52,680
acupuncture point you stimulate a region

74
00:02:50,969 --> 00:02:54,240
that's not an acupuncture point you

75
00:02:52,680 --> 00:02:56,310
don't see this when you stimulate the

76
00:02:54,240 --> 00:02:57,870
acupuncture point you see it simulate a

77
00:02:56,310 --> 00:02:59,550
non acupuncture point you don't see it

78
00:02:57,870 --> 00:03:03,409
seem to let the acupuncture point you do

79
00:02:59,550 --> 00:03:05,310
so you tell me what's the problem and

80
00:03:03,409 --> 00:03:07,379
hopefully someone can also explain

81
00:03:05,310 --> 00:03:09,900
what's going on it's certainly

82
00:03:07,379 --> 00:03:11,250
consistent with subtle energy fields or

83
00:03:09,900 --> 00:03:12,480
perhaps the acupuncture point is

84
00:03:11,250 --> 00:03:14,610
generating a pulse of electromagnetic

85
00:03:12,479 --> 00:03:18,509
energy that's picked up an acupuncture

86

00:03:14,610 --> 00:03:20,310
one in the brain the the process is is

87
00:03:18,509 --> 00:03:21,899
still very very much under studying an

88
00:03:20,310 --> 00:03:24,509
investigation

89
00:03:21,900 --> 00:03:27,659
well we've sort of delineated three

90
00:03:24,509 --> 00:03:29,219
different pathways by which the signals

91
00:03:27,659 --> 00:03:31,650
of stimulation actually get to the brain

92
00:03:29,219 --> 00:03:36,000
there's this very very fast signal could

93
00:03:31,650 --> 00:03:38,340
be instantaneous there is activity that

94
00:03:36,000 --> 00:03:39,900
you see in the visual cortex about a

95
00:03:38,340 --> 00:03:42,270
hundred and eighty 200 milliseconds

96
00:03:39,900 --> 00:03:44,969
later this is clearly along a nerve

97
00:03:42,270 --> 00:03:47,330
pathway and then there's this very slow

98
00:03:44,969 --> 00:03:51,180
signal that moves along the meridians

99
00:03:47,330 --> 00:03:53,040
taking many seconds to get to the to the

100
00:03:51,180 --> 00:03:56,310

brain center so what you see in AFM our

101

00:03:53,039 --> 00:03:59,579

image is an initial pulse of activity

102

00:03:56,310 --> 00:04:01,849

then additional activity at this time

103

00:03:59,580 --> 00:04:06,300

frame and in much later additional

104

00:04:01,849 --> 00:04:08,549

activities our studies of acupuncture is

105

00:04:06,300 --> 00:04:10,140

still in a very early stage there are

106

00:04:08,550 --> 00:04:12,239

many challenging and fundamental

107

00:04:10,139 --> 00:04:14,309

problems remain to be solved however I

108

00:04:12,239 --> 00:04:16,319

really do think that the results could

109

00:04:14,310 --> 00:04:17,910

potentially fundamentally change not

110

00:04:16,319 --> 00:04:20,269

only the practice of medicine delivery

111

00:04:17,910 --> 00:04:22,890

of healthcare system but we may also

112

00:04:20,269 --> 00:04:23,750

shake up the standard scientific

113

00:04:22,889 --> 00:04:35,349

paradigm just

114

00:04:23,750 --> 00:04:39,730

but thank you very much how exciting I

115
00:04:35,350 --> 00:04:42,950
promise this lady from the last session

116
00:04:39,730 --> 00:04:46,759
hi I'm Baris Sims and this is a question

117
00:04:42,949 --> 00:04:48,849
leftover from your last session I'm

118
00:04:46,759 --> 00:04:51,199
really interested in your use of

119
00:04:48,850 --> 00:04:53,120
cleaning the laboratories and the

120
00:04:51,199 --> 00:04:54,829
healing and the housecleaning with

121
00:04:53,120 --> 00:04:56,209
colors and would like to know more about

122
00:04:54,829 --> 00:04:59,209
that

123
00:04:56,209 --> 00:05:01,699
are there specific reasons why certain

124
00:04:59,209 --> 00:05:04,129
colors might be selected and what with

125
00:05:01,699 --> 00:05:07,459
their effects being is there a certain

126
00:05:04,129 --> 00:05:12,620
color that's shown in a dirty lab versus

127
00:05:07,459 --> 00:05:13,759
a clean lab well there are there are a

128
00:05:12,620 --> 00:05:16,579
number there are a number of books about

129
00:05:13,759 --> 00:05:18,560
you know I'm I have amateur status as a

130
00:05:16,579 --> 00:05:21,859
pranic healer so are are as a healer in

131
00:05:18,560 --> 00:05:25,069
general but there are a number of books

132
00:05:21,860 --> 00:05:27,290
available on on on healing and in pranic

133
00:05:25,069 --> 00:05:28,759
healing in particular in fact there's a

134
00:05:27,290 --> 00:05:32,110
marvelous book called your hands can

135
00:05:28,759 --> 00:05:34,969
heal you that's written by Stephen Coe

136
00:05:32,110 --> 00:05:37,699
that's I think it's quite a wonderful

137
00:05:34,970 --> 00:05:39,440
book and it turns out we have a superb

138
00:05:37,699 --> 00:05:40,879
rumba chronic healer with us today that

139
00:05:39,439 --> 00:05:44,360
I didn't know was gonna be here Mary

140
00:05:40,879 --> 00:05:46,579
Clark and you why don't you you can chat

141
00:05:44,360 --> 00:05:48,199
with her later because she knows about

142
00:05:46,579 --> 00:05:50,418
everything about pranic healing if one

143

00:05:48,199 --> 00:05:55,370
should ever know how did I set you up

144
00:05:50,418 --> 00:05:58,430
okay and she lives in San Diego I'll put

145
00:05:55,370 --> 00:06:01,399
in a plug for you she's in she's in San

146
00:05:58,430 --> 00:06:05,030
Diego and she she actually does pranic

147
00:06:01,399 --> 00:06:06,139
healing in her practice and is quite

148
00:06:05,029 --> 00:06:09,709
active in the pranic healing community

149
00:06:06,139 --> 00:06:13,219
and is also a very nice person

150
00:06:09,709 --> 00:06:15,168
so Joey Karl med would if I have a

151
00:06:13,220 --> 00:06:18,680
question regarding the stimulation of

152
00:06:15,168 --> 00:06:21,349
acupuncture point where you the one's

153
00:06:18,680 --> 00:06:23,959
further down the Meridian adopted the

154
00:06:21,350 --> 00:06:27,500
same shape did they seem to be aligned

155
00:06:23,959 --> 00:06:29,299
on a like a north-south axis is is that

156
00:06:27,500 --> 00:06:31,819
the alignment type of thing you know no

157
00:06:29,300 --> 00:06:35,370

no there's barely that metaphorically

158

00:06:31,819 --> 00:06:37,139

the north-south but I mean in a way that

159

00:06:35,370 --> 00:06:40,050

one could describe his north-south it

160

00:06:37,139 --> 00:06:41,310

was no the the acupuncture points the

161

00:06:40,050 --> 00:06:44,040

top of the acupuncture points were

162

00:06:41,310 --> 00:06:45,269

facing the skin so if you come up a leg

163

00:06:44,040 --> 00:06:53,699

they're all sort of facing in the same

164

00:06:45,269 --> 00:06:56,370

direction up the leg okay hi no no I I

165

00:06:53,699 --> 00:06:57,900

don't know that's the way that's the way

166

00:06:56,370 --> 00:07:00,449

they are I you know what makes them that

167

00:06:57,899 --> 00:07:03,120

way I'm not sure Mike Wilson how long

168

00:07:00,449 --> 00:07:08,580

does the acupuncture stay stimulated

169

00:07:03,120 --> 00:07:10,350

after it's been stimulated I wish I had

170

00:07:08,579 --> 00:07:15,029

a good answer for you that it depends on

171

00:07:10,350 --> 00:07:16,770

the level of stimulation you do if you

172
00:07:15,029 --> 00:07:19,168
continually stimulate the acupuncture

173
00:07:16,769 --> 00:07:21,000
points they seem to be stimulated for a

174
00:07:19,168 --> 00:07:22,680
longer period of time but quite honestly

175
00:07:21,000 --> 00:07:24,180
that's not something that we've really

176
00:07:22,680 --> 00:07:27,120
looked at carefully we have some sort of

177
00:07:24,180 --> 00:07:28,530
anecdotal data on that but I really

178
00:07:27,120 --> 00:07:32,750
wouldn't be able to answer the question

179
00:07:28,529 --> 00:07:35,129
very carefully I'm Darryl ahem

180
00:07:32,750 --> 00:07:37,439
absolutely amazing work these last three

181
00:07:35,129 --> 00:07:39,930
talks have just blown me away the

182
00:07:37,439 --> 00:07:42,959
question I have is what this tells us

183
00:07:39,930 --> 00:07:45,590
about replicability in other labs

184
00:07:42,959 --> 00:07:48,029
especially hostile labs toward the SCI

185
00:07:45,589 --> 00:07:51,449
condition but I know it's better that

186
00:07:48,029 --> 00:07:54,059
you're that you're of publishing in sort

187
00:07:51,449 --> 00:07:56,069
of preaching to the choir publications

188
00:07:54,060 --> 00:07:58,168
and we want to change the standard

189
00:07:56,069 --> 00:07:59,550
scientific paradigm I'm wondering with

190
00:07:58,168 --> 00:08:01,949
the quality of these studies that I've

191
00:07:59,550 --> 00:08:04,348
observed where have you tried to publish

192
00:08:01,949 --> 00:08:07,110
and what were their reasons for not

193
00:08:04,348 --> 00:08:11,279
publishing well that's an interesting

194
00:08:07,110 --> 00:08:13,319
story let me let me talk to you let me

195
00:08:11,279 --> 00:08:14,969
let me mention let's forget about pranic

196
00:08:13,319 --> 00:08:16,529
healing that's just too weird but let's

197
00:08:14,970 --> 00:08:18,660
talk about the acupuncture study okay

198
00:08:16,529 --> 00:08:21,779
when we did this acupuncture study the

199
00:08:18,660 --> 00:08:23,610
initial one back in 96 97 with the

200

00:08:21,779 --> 00:08:26,819
images it was the first study that had

201
00:08:23,610 --> 00:08:28,439
ever been done where that showed a

202
00:08:26,819 --> 00:08:29,969
direct relationship between the

203
00:08:28,439 --> 00:08:34,139
stimulation of an acupuncture point in

204
00:08:29,970 --> 00:08:36,269
activity in the in the brain and I had

205
00:08:34,139 --> 00:08:37,799
already pre-selected the images that I

206
00:08:36,269 --> 00:08:40,528
knew were going to be in the first cup

207
00:08:37,799 --> 00:08:41,879
on the front cover of science and you

208
00:08:40,528 --> 00:08:44,820
know and so we wrote this paper for

209
00:08:41,879 --> 00:08:46,409
science we submitted it we didn't get a

210
00:08:44,820 --> 00:08:49,019
response

211
00:08:46,409 --> 00:08:52,649
and finally after a while we called the

212
00:08:49,019 --> 00:08:55,019
the editor in Washington and one of the

213
00:08:52,649 --> 00:08:58,559
one of the staff members basically said

214
00:08:55,019 --> 00:09:01,139

oh you submitted that paper we don't

215

00:08:58,559 --> 00:09:03,750

review that sort of stuff so we could

216

00:09:01,139 --> 00:09:04,560

even get a review all right now the

217

00:09:03,750 --> 00:09:07,110

story goes on

218

00:09:04,559 --> 00:09:10,828

we then submitted the manuscript to

219

00:09:07,110 --> 00:09:12,539

nature and now there are three editors

220

00:09:10,828 --> 00:09:14,039

of nature there's one in London there's

221

00:09:12,539 --> 00:09:15,809

one in Washington there's one in Tokyo

222

00:09:14,039 --> 00:09:17,429

so we thought well we might have a

223

00:09:15,809 --> 00:09:20,878

better response if we submitted this to

224

00:09:17,429 --> 00:09:22,078

Tokyo we did and the editor in Tokyo did

225

00:09:20,879 --> 00:09:23,370

actually read the paper and thought it

226

00:09:22,078 --> 00:09:27,989

was interesting but was extremely

227

00:09:23,370 --> 00:09:30,480

uncomfortable publishing this he decided

228

00:09:27,990 --> 00:09:36,089

that he would consider it if we could

229
00:09:30,480 --> 00:09:40,680
get a of outside reviewers of our choice

230
00:09:36,089 --> 00:09:43,019
that would write letters about it we had

231
00:09:40,679 --> 00:09:45,659
five Nobel Prize winners in the

232
00:09:43,019 --> 00:09:48,539
neurosciences that wrote five raved

233
00:09:45,659 --> 00:09:50,789
letters about the manuscript and he

234
00:09:48,539 --> 00:09:54,509
still decided that it he just couldn't

235
00:09:50,789 --> 00:09:56,610
publish this in nature all five of the

236
00:09:54,509 --> 00:09:58,649
members the Nobel Prize winners were

237
00:09:56,610 --> 00:10:01,759
also members of the National Academy and

238
00:09:58,649 --> 00:10:01,759
to get a paper published