
PAO

1
00:00:05,670 --> 00:00:03,270
after the dragon spacecraft does arrive

2
00:00:07,269 --> 00:00:05,680
at the station and the hatches are open

3
00:00:09,430 --> 00:00:07,279
the crews on board are going to start to

4
00:00:12,230 --> 00:00:09,440
unload the cargo that's inside now the

5
00:00:14,549 --> 00:00:12,240
largest portion of that cargo is food

6
00:00:16,710 --> 00:00:14,559
and crew provisions but there is science

7
00:00:18,150 --> 00:00:16,720
experiment hardware in there as well

8
00:00:20,790 --> 00:00:18,160
we're going to find out this morning

9
00:00:22,790 --> 00:00:20,800
more about those that cargo and other

10
00:00:24,710 --> 00:00:22,800
news regarding space station science

11
00:00:27,189 --> 00:00:24,720
from dr tara rutley the international

12
00:00:28,870 --> 00:00:27,199
space station's assistant associate

13
00:00:29,990 --> 00:00:28,880

program scientist got it associate

14
00:00:32,870 --> 00:00:30,000
program

15
00:00:35,270 --> 00:00:32,880
the only science payloads inside this

16
00:00:37,510 --> 00:00:35,280
spaceship are coming from a dozen groups

17
00:00:39,750 --> 00:00:37,520
of school kids uh tell me about the

18
00:00:41,910 --> 00:00:39,760
student space flight experiment program

19
00:00:43,590 --> 00:00:41,920
sure how cool is that right

20
00:00:45,910 --> 00:00:43,600
i know that the students who are

21
00:00:48,470 --> 00:00:45,920
watching this whole spacex demo launch

22
00:00:50,470 --> 00:00:48,480
and and watching their payload go

23
00:00:52,150 --> 00:00:50,480
must be super super thrilled

24
00:00:54,470 --> 00:00:52,160
beyond anything probably that a science

25
00:00:57,350 --> 00:00:54,480
fair could even do for them but

26
00:00:59,510 --> 00:00:57,360
so this is a program that's

27
00:01:01,189 --> 00:00:59,520
sponsored jointly actually by the

28
00:01:02,790 --> 00:01:01,199
national center for earth and space

29
00:01:03,830 --> 00:01:02,800
science education

30
00:01:05,750 --> 00:01:03,840
and

31
00:01:07,109 --> 00:01:05,760
the nanoracks the company nanoracks

32
00:01:09,510 --> 00:01:07,119
commercial company

33
00:01:11,670 --> 00:01:09,520
and so it's as part of a student

34
00:01:14,149 --> 00:01:11,680
competition and this is the first of its

35
00:01:15,670 --> 00:01:14,159
kind that's going to stay on station

36
00:01:18,070 --> 00:01:15,680
although this program has a history of

37
00:01:20,390 --> 00:01:18,080
launching two i think two previous

38
00:01:21,429 --> 00:01:20,400

student investigations on a nanoracks

39
00:01:24,149 --> 00:01:21,439
module

40
00:01:27,109 --> 00:01:24,159
uh on the shuttle missions so what

41
00:01:29,109 --> 00:01:27,119
nanoracks is it's a small laboratory

42
00:01:30,870 --> 00:01:29,119
basically a very mini laboratory that

43
00:01:33,510 --> 00:01:30,880
can get launched to station and can live

44
00:01:34,950 --> 00:01:33,520
on station and you know you basically

45
00:01:36,710 --> 00:01:34,960
plug and play these experiments and they

46
00:01:40,149 --> 00:01:36,720
can do their thing while they're up in

47
00:01:42,389 --> 00:01:40,159
microgravity and so nanoracks and the

48
00:01:44,710 --> 00:01:42,399
program partnered and put out a call for

49
00:01:47,350 --> 00:01:44,720
proposals for students last year i think

50
00:01:49,190 --> 00:01:47,360
it was last fall to compete you know

51
00:01:51,190 --> 00:01:49,200
compete and design and create a proposal

52
00:01:52,469 --> 00:01:51,200
as as to basically what do you think you

53
00:01:55,429 --> 00:01:52,479
might see

54
00:01:56,709 --> 00:01:55,439
in terms of changes um in experiments in

55
00:01:58,310 --> 00:01:56,719
microgravity

56
00:02:00,469 --> 00:01:58,320
so students from across the nation

57
00:02:02,789 --> 00:02:00,479
participated there were nearly 800

58
00:02:05,270 --> 00:02:02,799
proposals that were submitted from the

59
00:02:07,030 --> 00:02:05,280
students and it and it basically reached

60
00:02:09,190 --> 00:02:07,040
out to about that that involved about 3

61
00:02:11,990 --> 00:02:09,200
500 students actually participating in

62
00:02:13,190 --> 00:02:12,000
experimental design in a way that was

63
00:02:15,990 --> 00:02:13,200

different because when you're creating a

64
00:02:17,510 --> 00:02:16,000
new experiment for for space station you

65
00:02:20,390 --> 00:02:17,520
have to take gravity out of the equation

66
00:02:23,750 --> 00:02:20,400
and that's a complete challenge so after

67
00:02:25,990 --> 00:02:23,760
two grueling rounds of um of uh

68
00:02:27,990 --> 00:02:26,000
selection processes from top-notch

69
00:02:29,190 --> 00:02:28,000
researchers all over the country

70
00:02:30,710 --> 00:02:29,200
they all came together at the air and

71
00:02:33,190 --> 00:02:30,720
space museum

72
00:02:36,229 --> 00:02:33,200
at the smithsonian and dc and selected

73
00:02:38,229 --> 00:02:36,239
the finalists and the finalists were uh

74
00:02:40,390 --> 00:02:38,239
representing um there were 12

75
00:02:42,229 --> 00:02:40,400
communities representing nine states

76
00:02:44,550 --> 00:02:42,239
including and and the district of

77
00:02:46,470 --> 00:02:44,560
columbia uh to

78
00:02:48,949 --> 00:02:46,480
basically get their experiment launched

79
00:02:50,309 --> 00:02:48,959
on station and get to sit on station for

80
00:02:51,190 --> 00:02:50,319
a while to see what they can come up

81
00:02:52,869 --> 00:02:51,200
with

82
00:02:54,630 --> 00:02:52,879
so what did the what are the winners

83
00:02:56,790 --> 00:02:54,640
investigating so the winners are

84
00:02:58,949 --> 00:02:56,800
investigating a wide range of things and

85
00:03:01,030 --> 00:02:58,959
when i read through these i'm i'm like

86
00:03:04,390 --> 00:03:01,040
this is super cool because the thing

87
00:03:06,710 --> 00:03:04,400
about the students uh experiments is

88
00:03:08,070 --> 00:03:06,720

you know some of them are complete

89
00:03:09,750 --> 00:03:08,080
shots in the dark you don't know what

90
00:03:11,670 --> 00:03:09,760
you don't know so

91
00:03:12,949 --> 00:03:11,680
basic discovery and a chance that hey i

92
00:03:13,990 --> 00:03:12,959
want to see how some of this stuff comes

93
00:03:16,390 --> 00:03:14,000
out so

94
00:03:19,030 --> 00:03:16,400
one of them is investigating uh grape

95
00:03:20,869 --> 00:03:19,040
fermentation in space so they've got a

96
00:03:22,949 --> 00:03:20,879
ground control and they and they flew a

97
00:03:24,630 --> 00:03:22,959
set up on on the space station where

98
00:03:26,869 --> 00:03:24,640
they're looking at um they're going to

99
00:03:28,390 --> 00:03:26,879
measure carbon dioxide production rates

100
00:03:30,309 --> 00:03:28,400
and so this sample needs to come home so

101
00:03:32,949 --> 00:03:30,319
they can compare their their flown

102
00:03:34,550 --> 00:03:32,959
sample to the ground and see which which

103
00:03:36,309 --> 00:03:34,560
which part ferments faster the one in

104
00:03:38,070 --> 00:03:36,319
space or the one on the ground

105
00:03:40,309 --> 00:03:38,080
there's another one looking at the

106
00:03:42,869 --> 00:03:40,319
parathyroid effects of parathyroid

107
00:03:44,630 --> 00:03:42,879
hormone on the growth of bone cells

108
00:03:45,670 --> 00:03:44,640
there's another one which is really cool

109
00:03:47,830 --> 00:03:45,680
they're gonna

110
00:03:50,309 --> 00:03:47,840
send dormant kill fish eggs up to

111
00:03:52,070 --> 00:03:50,319
station rehydrate them on station and

112
00:03:53,830 --> 00:03:52,080
watch them develop and get the samples

113
00:03:55,429 --> 00:03:53,840

back and look at how those samples have

114
00:03:57,270 --> 00:03:55,439
developed in space

115
00:03:59,509 --> 00:03:57,280
pretty cool stuff right how old are

116
00:04:01,350 --> 00:03:59,519
these students well they range from

117
00:04:03,509 --> 00:04:01,360
fifth grade all the way to i believe

118
00:04:06,470 --> 00:04:03,519
there is a community college involvement

119
00:04:08,949 --> 00:04:06,480
as well and the uh and now there's even

120
00:04:10,390 --> 00:04:08,959
a university for four-year universities

121
00:04:11,990 --> 00:04:10,400
who can participate in the upcoming

122
00:04:14,630 --> 00:04:12,000
missions as well but

123
00:04:15,750 --> 00:04:14,640
i you know i've i got online when these

124
00:04:17,670 --> 00:04:15,760
came up and i kind of started

125
00:04:19,189 --> 00:04:17,680
investigating these myself and i've seen

126
00:04:20,949 --> 00:04:19,199
what happens is when these students get

127
00:04:23,030 --> 00:04:20,959
their samples back and complete their

128
00:04:24,390 --> 00:04:23,040
analysis they all come to a conference

129
00:04:26,710 --> 00:04:24,400
at the air and space museum at the

130
00:04:28,950 --> 00:04:26,720
smithsonian in dc and they stand on

131
00:04:31,350 --> 00:04:28,960
stage and they have their presentation

132
00:04:32,469 --> 00:04:31,360
and they give their final results like

133
00:04:34,629 --> 00:04:32,479
like you would at a scientific

134
00:04:37,749 --> 00:04:34,639
conference so i'm watching these fifth

135
00:04:39,350 --> 00:04:37,759
graders who i would have never done what

136
00:04:41,430 --> 00:04:39,360
they had done in fifth grade you know my

137
00:04:44,150 --> 00:04:41,440
science fair projects were never as cool

138
00:04:45,670 --> 00:04:44,160

so uh so they take it from beginning

139
00:04:47,350 --> 00:04:45,680
from experimental design to

140
00:04:49,430 --> 00:04:47,360
implementation to completing the

141
00:04:51,590 --> 00:04:49,440
analysis and communicating the results

142
00:04:54,070 --> 00:04:51,600
and so uh even at a fifth grade level

143
00:04:56,070 --> 00:04:54,080
all you know that's insanely cool very

144
00:04:57,990 --> 00:04:56,080
sophisticated experiments for the

145
00:05:00,550 --> 00:04:58,000
students

146
00:05:03,670 --> 00:05:00,560
along with designing them originally in

147
00:05:04,950 --> 00:05:03,680
these students also had to redesign some

148
00:05:06,550 --> 00:05:04,960
of their experiments or at least

149
00:05:08,710 --> 00:05:06,560
consider redesign because they were

150
00:05:10,710 --> 00:05:08,720
originally going to fly on a different

151
00:05:12,790 --> 00:05:10,720
spacecraft so they had they had to look

152
00:05:15,909 --> 00:05:12,800
at redoing it just like you would have

153
00:05:17,749 --> 00:05:15,919
to maybe redo things in real life

154
00:05:19,590 --> 00:05:17,759
how helpful is that for them that's

155
00:05:21,510 --> 00:05:19,600
right it's the real world that's how

156
00:05:23,830 --> 00:05:21,520
helpful it is um

157
00:05:26,150 --> 00:05:23,840
and and and analogous to that every

158
00:05:28,310 --> 00:05:26,160
scientist whoever does any investigation

159
00:05:29,749 --> 00:05:28,320
the first time around it never comes out

160
00:05:31,350 --> 00:05:29,759
the first time right so science is an

161
00:05:33,270 --> 00:05:31,360
iterative process now when you're

162
00:05:35,830 --> 00:05:33,280
talking about space flight it's it's a

163
00:05:37,749 --> 00:05:35,840

completely uniquely iterative process

164
00:05:39,350 --> 00:05:37,759
and just like our scientists our

165
00:05:41,350 --> 00:05:39,360
investigators on the full-time space

166
00:05:43,990 --> 00:05:41,360
station have these students met the

167
00:05:45,029 --> 00:05:44,000
challenge um of you know when they were

168
00:05:46,390 --> 00:05:45,039
still where they were early in the

169
00:05:48,310 --> 00:05:46,400
selection process

170
00:05:50,310 --> 00:05:48,320
these students were told they were

171
00:05:52,150 --> 00:05:50,320
realized that their projects couldn't be

172
00:05:55,270 --> 00:05:52,160
refrigerated and transport from houston

173
00:05:57,189 --> 00:05:55,280
to kazakhstan and then couldn't be

174
00:05:59,029 --> 00:05:57,199
refrigerated in the soyuz that they were

175
00:06:00,550 --> 00:05:59,039
planning to launch these experiments in

176
00:06:02,309 --> 00:06:00,560
so the students were asked to go back

177
00:06:04,790 --> 00:06:02,319
and reevaluate their experiments and see

178
00:06:06,710 --> 00:06:04,800
if they could do without refrigeration

179
00:06:08,950 --> 00:06:06,720
and then there were there were three

180
00:06:11,590 --> 00:06:08,960
subsequent experiments who couldn't do

181
00:06:13,830 --> 00:06:11,600
without refrigeration so um so they were

182
00:06:15,909 --> 00:06:13,840
uh their alternates were selected

183
00:06:18,230 --> 00:06:15,919
and so students were moving forward with

184
00:06:20,710 --> 00:06:18,240
those um investigations preparing them

185
00:06:23,510 --> 00:06:20,720
for launch on soyuz and then in january

186
00:06:25,830 --> 00:06:23,520
soyuz had a pressurization test fail

187
00:06:28,629 --> 00:06:25,840
which then again impacted their flight

188
00:06:31,029 --> 00:06:28,639

and as a result of all that nasa moved

189
00:06:33,590 --> 00:06:31,039
this investigational payload to

190
00:06:35,189 --> 00:06:33,600
the historic now spacex demo launch

191
00:06:39,670 --> 00:06:35,199
which

192
00:06:41,670 --> 00:06:39,680
cold cold stowage capability so not only

193
00:06:43,430 --> 00:06:41,680
did the alternates get to fly the three

194
00:06:45,590 --> 00:06:43,440
alternates but the original three that

195
00:06:47,749 --> 00:06:45,600
needed refrigeration also got to fly so

196
00:06:50,629 --> 00:06:47,759
now instead of 12 experiments going up

197
00:06:52,550 --> 00:06:50,639
we have 15 and so everyone's satisfied

198
00:06:54,790 --> 00:06:52,560
and they the students get to participate

199
00:06:56,629 --> 00:06:54,800
in a historic launch to space station

200
00:06:59,029 --> 00:06:56,639
and the first commercial cargo vehicle

201
00:07:00,629 --> 00:06:59,039
to dock from the u.s so

202
00:07:02,309 --> 00:07:00,639
do all of them come back do they all

203
00:07:04,390 --> 00:07:02,319
have to have samples that have to come

204
00:07:06,230 --> 00:07:04,400
back to be to be examined not all of

205
00:07:08,469 --> 00:07:06,240
them need to come back to have samples

206
00:07:10,469 --> 00:07:08,479
of the majority of them do and that's

207
00:07:12,550 --> 00:07:10,479
also critical for our investigators and

208
00:07:15,350 --> 00:07:12,560
that's why we're excited about spacex

209
00:07:17,270 --> 00:07:15,360
because spacex represents

210
00:07:19,350 --> 00:07:17,280
our nation's capability now of getting

211
00:07:21,830 --> 00:07:19,360
any kind of return of samples from space

212
00:07:23,589 --> 00:07:21,840
station and so although these

213
00:07:26,070 --> 00:07:23,599

investigations won't come back on space

214
00:07:28,230 --> 00:07:26,080
station won't come back on spacex

215
00:07:30,870 --> 00:07:28,240
they'll come back later on soyuz we do

216
00:07:32,070 --> 00:07:30,880
need the samples returned so they want

217
00:07:34,870 --> 00:07:32,080
to look at you know how the fish

218
00:07:36,150 --> 00:07:34,880
developed the returns capabilities the

219
00:07:37,589 --> 00:07:36,160
return requirements i should say of

220
00:07:39,029 --> 00:07:37,599
these experiments don't require

221
00:07:42,469 --> 00:07:39,039
refrigeration so they are going to come

222
00:07:43,909 --> 00:07:42,479
back on a soyuz but in general spacex

223
00:07:45,589 --> 00:07:43,919
in terms of science we're excited

224
00:07:47,110 --> 00:07:45,599
because it because those will that will

225
00:07:49,029 --> 00:07:47,120
require code storage capabilities we'll

226
00:07:50,469 --> 00:07:49,039
get that in the future there will be

227
00:07:53,029 --> 00:07:50,479
other kids in the future that'll get

228
00:07:55,749 --> 00:07:53,039
this opportunity yeah so they just

229
00:07:57,270 --> 00:07:55,759
completed a second round of selection

230
00:07:59,749 --> 00:07:57,280
for the mission two because this is

231
00:08:01,589 --> 00:07:59,759
called mission 1 station mission 2 is

232
00:08:03,510 --> 00:08:01,599
going to be launched to station in the

233
00:08:05,029 --> 00:08:03,520
fall so those have been selected and

234
00:08:07,830 --> 00:08:05,039
just at the end of april there's been

235
00:08:09,589 --> 00:08:07,840
another call for proposals

236
00:08:11,510 --> 00:08:09,599
for students who are interested in

237
00:08:14,550 --> 00:08:11,520
flying mission 3 and mission three is

238
00:08:17,029 --> 00:08:14,560

expected to launch in uh the spring of

239
00:08:19,909 --> 00:08:17,039
next year so there's one opportunity

240
00:08:23,510 --> 00:08:19,919
after another and from what i've read

241
00:08:24,629 --> 00:08:23,520
this program makes it really really um i

242
00:08:26,790 --> 00:08:24,639
wouldn't say easy because you still have

243
00:08:29,029 --> 00:08:26,800
to compete but if you're interested they

244
00:08:30,869 --> 00:08:29,039
accept all proposals all ideas from

245
00:08:32,949 --> 00:08:30,879
across the range so nothing is off the

246
00:08:34,469 --> 00:08:32,959
table and they do their best to

247
00:08:36,389 --> 00:08:34,479
accommodate and get you up there if

248
00:08:37,430 --> 00:08:36,399
you're selected so they really really

249
00:08:39,269 --> 00:08:37,440
have

250
00:08:40,469 --> 00:08:39,279
a serious stake in this for the students

251
00:08:41,909 --> 00:08:40,479
and

252
00:08:43,350 --> 00:08:41,919
i can't wait to see the results that

253
00:08:45,509 --> 00:08:43,360
come back frankly

254
00:08:46,550 --> 00:08:45,519
and then on another topic it was three

255
00:08:48,790 --> 00:08:46,560
years ago

256
00:08:51,190 --> 00:08:48,800
just next week the time that expedition

257
00:08:54,310 --> 00:08:51,200
20 began right when the station expanded

258
00:08:56,470 --> 00:08:54,320
to a full-time crew of six people have

259
00:08:58,710 --> 00:08:56,480
you seen a significant change in the

260
00:09:01,990 --> 00:08:58,720
amount of science work that crew members

261
00:09:03,910 --> 00:09:02,000
are are getting through since the crew's

262
00:09:05,910 --> 00:09:03,920
size has doubled yes the significant

263
00:09:07,350 --> 00:09:05,920

change our office is kept really really

264
00:09:08,870 --> 00:09:07,360
busy i've been in the office for three

265
00:09:10,710 --> 00:09:08,880
years right around when that point

266
00:09:12,389 --> 00:09:10,720
started and i've seen uh the

267
00:09:14,870 --> 00:09:12,399
capabilities increase in the in the

268
00:09:17,030 --> 00:09:14,880
number of crew hours in fact if i had to

269
00:09:19,350 --> 00:09:17,040
to couch it i'd say a little over two

270
00:09:21,910 --> 00:09:19,360
times as much as getting done on station

271
00:09:24,470 --> 00:09:21,920
in terms of research from the crew

272
00:09:26,150 --> 00:09:24,480
and our office is over two times as busy

273
00:09:28,230 --> 00:09:26,160
and we're all excited so i know i've

274
00:09:30,389 --> 00:09:28,240
seen it firsthand the ramp up of the of

275
00:09:32,790 --> 00:09:30,399
the number of investigations the quality

276
00:09:33,910 --> 00:09:32,800
of the investigations the organization

277
00:09:35,110 --> 00:09:33,920
of the investigations and the

278
00:09:36,949 --> 00:09:35,120
communication with the principal

279
00:09:39,509 --> 00:09:36,959
investigators so it's been a real

280
00:09:41,829 --> 00:09:39,519
exciting three years is there a way to

281
00:09:43,990 --> 00:09:41,839
characterize the quality of that

282
00:09:46,550 --> 00:09:44,000
increased quantity yeah everybody wants

283
00:09:48,870 --> 00:09:46,560
to know you know what station doing for

284
00:09:52,070 --> 00:09:48,880
for us and it's hard to characterize the

285
00:09:54,150 --> 00:09:52,080
quality because it the results keep

286
00:09:57,030 --> 00:09:54,160
coming in in different areas so human

287
00:09:59,509 --> 00:09:57,040
health earth observation and

288
00:10:00,550 --> 00:09:59,519

education and you know materials

289
00:10:02,710 --> 00:10:00,560
improvements

290
00:10:04,949 --> 00:10:02,720
and and and now that assembly is

291
00:10:06,550 --> 00:10:04,959
complete and we're facing full-time use

292
00:10:08,389 --> 00:10:06,560
of station

293
00:10:10,470 --> 00:10:08,399
the results come in piece by piece and

294
00:10:12,710 --> 00:10:10,480
we do our best to communicate them and

295
00:10:14,069 --> 00:10:12,720
each one has its own value to the public

296
00:10:15,750 --> 00:10:14,079
and so

297
00:10:18,230 --> 00:10:15,760
so really i think what we're going to

298
00:10:20,069 --> 00:10:18,240
look ahead towards is the next eight

299
00:10:21,910 --> 00:10:20,079
years of utilization we're in the decade

300
00:10:24,150 --> 00:10:21,920
of utilization so even in that first 10

301
00:10:26,230 --> 00:10:24,160
years of assembly we did get amazing

302
00:10:27,829 --> 00:10:26,240
results they're trickling in just from

303
00:10:29,190 --> 00:10:27,839
that first 10 years even though we were

304
00:10:30,710 --> 00:10:29,200
busy with assembly and it's just like

305
00:10:33,190 --> 00:10:30,720
apollo we're still seeing results from

306
00:10:35,590 --> 00:10:33,200
apollo so hard to characterize all of

307
00:10:37,509 --> 00:10:35,600
that they're just still coming in

308
00:10:39,590 --> 00:10:37,519
we are on our office definitely get a

309
00:10:41,670 --> 00:10:39,600
grasp of all the super cool results that

310
00:10:44,150 --> 00:10:41,680
keep coming in and we're busy compiling

311
00:10:45,350 --> 00:10:44,160
them and communicating them and

312
00:10:47,430 --> 00:10:45,360
and you know making sure the public

313
00:10:49,509 --> 00:10:47,440

knows how they're uh they're beneficial

314
00:10:51,670 --> 00:10:49,519
to them as well there's an event coming

315
00:10:53,350 --> 00:10:51,680
up soon that we're going to do that to

316
00:10:55,670 --> 00:10:53,360
uh to give everybody a chance to learn

317
00:10:57,430 --> 00:10:55,680
more about science tell us about the the

318
00:10:59,829 --> 00:10:57,440
uh space station research and

319
00:11:01,350 --> 00:10:59,839
development conference in june yeah it's

320
00:11:03,110 --> 00:11:01,360
pretty much a dream event for

321
00:11:05,670 --> 00:11:03,120
investigators who have ever done or

322
00:11:07,430 --> 00:11:05,680
wanted to do anything in space um

323
00:11:09,910 --> 00:11:07,440
it is a conference that will be june

324
00:11:12,069 --> 00:11:09,920
26th through the 28th in denver uh

325
00:11:14,550 --> 00:11:12,079
sponsored co-sponsored by

326
00:11:17,030 --> 00:11:14,560
kasis the national laboratory

327
00:11:18,870 --> 00:11:17,040
management office and the uh american

328
00:11:20,710 --> 00:11:18,880
astronautical society and it's the first

329
00:11:23,110 --> 00:11:20,720
ever conference where we'll pull

330
00:11:24,790 --> 00:11:23,120
together all of the major uh principal

331
00:11:27,110 --> 00:11:24,800
investigators involved in major results

332
00:11:28,949 --> 00:11:27,120
on space station not just to say look

333
00:11:30,550 --> 00:11:28,959
what i did look what benefits you

334
00:11:32,389 --> 00:11:30,560
although certainly we want to hear the

335
00:11:34,310 --> 00:11:32,399
benefits but also to share lessons

336
00:11:35,829 --> 00:11:34,320
learned right in science you really want

337
00:11:37,509 --> 00:11:35,839
to be able to talk about what worked and

338
00:11:39,030 --> 00:11:37,519

what didn't work and in space there's a

339
00:11:41,110 --> 00:11:39,040
lot that doesn't work and we want to be

340
00:11:42,949 --> 00:11:41,120
able to communicate that we'll also have

341
00:11:46,150 --> 00:11:42,959
an opportunity in that

342
00:11:47,990 --> 00:11:46,160
meeting to bring on potential new

343
00:11:49,670 --> 00:11:48,000
investigators so if you're a new

344
00:11:50,870 --> 00:11:49,680
investigator you're thinking about doing

345
00:11:52,069 --> 00:11:50,880
something on space station there are

346
00:11:53,190 --> 00:11:52,079
workshops that are going to be held

347
00:11:55,750 --> 00:11:53,200
there

348
00:11:58,230 --> 00:11:55,760
to tell you how to do it so it's uh it's

349
00:12:00,389 --> 00:11:58,240
going to be a pretty busy amazing

350
00:12:01,269 --> 00:12:00,399
wonderfully

351
00:12:04,069 --> 00:12:01,279
learning

352
00:12:05,030 --> 00:12:04,079
experience at this conference so i think

353
00:12:06,389 --> 00:12:05,040
if you're interested you should

354
00:12:09,110 --> 00:12:06,399
definitely get out there that's late

355
00:12:11,269 --> 00:12:09,120
june in denver is there a website where

356
00:12:15,670 --> 00:12:11,279
people who are interested yes i believe

357
00:12:19,110 --> 00:12:17,350
and then if you're interested in getting

358
00:12:21,750 --> 00:12:19,120
your student experiment up as part of

359
00:12:27,670 --> 00:12:21,760
the ssep program you should go to let's

360
00:12:31,590 --> 00:12:29,509
and if you missed that if you google

361
00:12:33,350 --> 00:12:31,600
ssep it's the first thing that pops up

362
00:12:35,509 --> 00:12:33,360
at the top of your search list sure you

363
00:12:36,949 --> 00:12:35,519

could go to nasa.gov and go to space

364
00:12:38,710 --> 00:12:36,959
station in the science section that's

365
00:12:40,230 --> 00:12:38,720
right find the address always come visit

366
00:12:42,069 --> 00:12:40,240
us in the science section we're there

367
00:12:44,069 --> 00:12:42,079
yes tara thanks very much thank you dr