
40:23
Leave
Matt S (Guest)
Yujie Wang (Guest)
GENES IN SPACE

1
00:01:12,020 --> 00:00:10,560
[Music]

2
00:01:17,749 --> 00:01:12,030
t-minus 30 seconds

3
00:01:19,320 --> 00:01:17,759
[Music]

4
00:01:23,429 --> 00:01:19,330
we are go for launch

5
00:01:23,439 --> 00:01:31,370
t-minus ten

6
00:01:36,390 --> 00:01:34,390
[Music]

7
00:01:38,830 --> 00:01:36,400
welcome to the nasa social for the crew

8
00:01:48,410 --> 00:01:38,840
one mission to the international space

9
00:02:21,030 --> 00:01:54,730
[Music]

10
00:02:25,030 --> 00:02:23,110
welcome back to the final segment of the

11
00:02:25,750 --> 00:02:25,040
nasa virtual social for the crew one

12
00:02:28,630 --> 00:02:25,760
mission

13
00:02:30,550 --> 00:02:28,640

i'm your host bethany hall for over 20

14
00:02:32,470 --> 00:02:30,560
years we have been living working and

15
00:02:33,589 --> 00:02:32,480
conducting research on the international

16
00:02:35,350 --> 00:02:33,599
space station

17
00:02:37,589 --> 00:02:35,360
it has been one of our most valuable

18
00:02:42,710 --> 00:02:37,599
assets for learning about how

19
00:02:44,390 --> 00:02:42,720
this the space affects the human body

20
00:02:46,150 --> 00:02:44,400
today we are going to be talking with

21
00:02:46,869 --> 00:02:46,160
two students who competed in the jeans

22
00:02:48,869 --> 00:02:46,879
in space

23
00:02:50,229 --> 00:02:48,879
challenge for those of you unfamiliar

24
00:02:55,509 --> 00:02:50,239
with the challenge let's take a quick

25
00:03:00,550 --> 00:02:59,270
minus 10 9 8. jeans in space is a

26
00:03:02,149 --> 00:03:00,560
science competition

27
00:03:04,229 --> 00:03:02,159
inviting students to make a real

28
00:03:07,030 --> 00:03:04,239
contribution to space exploration

29
00:03:08,070 --> 00:03:07,040
through dna analysis students in grades

30
00:03:10,710 --> 00:03:08,080
7 through 12

31
00:03:12,869 --> 00:03:10,720
design dna research proposals and become

32
00:03:14,470 --> 00:03:12,879
pioneers in space biology

33
00:03:17,030 --> 00:03:14,480
winners will participate in space

34
00:03:19,430 --> 00:03:17,040
biology camp and watch their experiments

35
00:03:20,470 --> 00:03:19,440
launched the international space station

36
00:03:23,560 --> 00:03:20,480
three

37
00:03:30,710 --> 00:03:23,570
two one

38
00:03:33,830 --> 00:03:32,869

i want to first start by introducing dr

39
00:03:35,990 --> 00:03:33,840
matt smith

40
00:03:38,309 --> 00:03:36,000
dr smith served as the mentor for

41
00:03:42,149 --> 00:03:38,319
vincent sampson and ug wang

42
00:03:44,070 --> 00:03:42,159
welcome everyone just a reminder

43
00:03:45,990 --> 00:03:44,080
you can ask questions or guest questions

44
00:03:48,550 --> 00:03:46,000
by typing them in the chat window

45
00:03:51,350 --> 00:03:48,560
dr smith tell me a little bit more about

46
00:03:54,789 --> 00:03:51,360
how you got involved with genes in space

47
00:03:55,589 --> 00:03:54,799
yeah great um yeah so my name is matthew

48
00:03:57,110 --> 00:03:55,599
smith

49
00:03:59,190 --> 00:03:57,120
i've been a mentor at jeans and space

50
00:04:00,949 --> 00:03:59,200
for the last two and a half years

51
00:04:02,550 --> 00:04:00,959
and while i've been a mentor there i've

52
00:04:05,670 --> 00:04:02,560
also been getting my phd

53
00:04:07,670 --> 00:04:05,680
from harvard in the subject of biology

54
00:04:09,910 --> 00:04:07,680
and there i've been working under the

55
00:04:11,509 --> 00:04:09,920
mentorship and in the research lab of dr

56
00:04:13,509 --> 00:04:11,519
benjamin de bibor

57
00:04:14,550 --> 00:04:13,519
and there i actually was interested in

58
00:04:17,509 --> 00:04:14,560
understanding

59
00:04:17,990 --> 00:04:17,519
uh individuality and behavior and well

60
00:04:19,270 --> 00:04:18,000
here

61
00:04:21,590 --> 00:04:19,280
probably in the next few minutes how

62
00:04:22,950 --> 00:04:21,600
that's relevant to the experiment of

63
00:04:26,070 --> 00:04:22,960

yugi and fin sam

64
00:04:27,590 --> 00:04:26,080
and um the what what we've actually come

65
00:04:29,510 --> 00:04:27,600
to refine and we're going to send up to

66
00:04:33,270 --> 00:04:29,520
the international space station

67
00:04:34,710 --> 00:04:33,280
so prior to my work at getting my phd at

68
00:04:36,629 --> 00:04:34,720
harvard i was at michigan state

69
00:04:38,150 --> 00:04:36,639
university where i studied biochemistry

70
00:04:40,469 --> 00:04:38,160
and molecular biology

71
00:04:42,469 --> 00:04:40,479
and that's actually kind of the first

72
00:04:44,230 --> 00:04:42,479
place where i got involved in research

73
00:04:45,590 --> 00:04:44,240
also through a mentorship program so

74
00:04:47,030 --> 00:04:45,600
genes in space definitely holds a

75
00:04:49,430 --> 00:04:47,040
special place in my heart

76
00:04:50,950 --> 00:04:49,440
um as another way where i can help

77
00:04:52,950 --> 00:04:50,960
engage younger scientists

78
00:04:54,150 --> 00:04:52,960
and get them ready for answering the big

79
00:04:55,990 --> 00:04:54,160
questions of the future

80
00:04:57,670 --> 00:04:56,000
um and so over the last year i had the

81
00:04:58,469 --> 00:04:57,680
honor and privilege to work with eugene

82
00:05:01,189 --> 00:04:58,479
finsam

83
00:05:01,670 --> 00:05:01,199
to take their original proposal um and

84
00:05:03,749 --> 00:05:01,680
kind of

85
00:05:05,670 --> 00:05:03,759
fine-tune it and work with them to do a

86
00:05:07,749 --> 00:05:05,680
lot of the groundwork to troubleshoot

87
00:05:09,270 --> 00:05:07,759
um and get a working tangible experiment

88
00:05:11,350 --> 00:05:09,280

to send to

89
00:05:13,510 --> 00:05:11,360
the incredible scientists at nasa and

90
00:05:14,790 --> 00:05:13,520
eventually get sent up to the iss

91
00:05:16,550 --> 00:05:14,800
international space station to be

92
00:05:17,830 --> 00:05:16,560
conducted by the team there

93
00:05:19,830 --> 00:05:17,840
it's been a really wonderful

94
00:05:22,629 --> 00:05:19,840
collaborative experience by the greater

95
00:05:24,629 --> 00:05:22,639
genesis space team um including another

96
00:05:27,510 --> 00:05:24,639
mentor dennis adabay

97
00:05:30,550 --> 00:05:27,520
and yeah and with that i'll pass to fin

98
00:05:33,590 --> 00:05:30,560
sam to do an introduction to himself

99
00:05:35,350 --> 00:05:33,600
yeah hi everyone i'm vincent sampson

100
00:05:37,990 --> 00:05:35,360
um we're excited to get questions from

101
00:05:40,629 --> 00:05:38,000
you all eugene and i entered jesus space

102
00:05:42,710 --> 00:05:40,639
a year and a half ago as seniors at troy

103
00:05:44,550 --> 00:05:42,720
high school in troy michigan

104
00:05:45,990 --> 00:05:44,560
we proposed a study that was looking at

105
00:05:48,629 --> 00:05:46,000
how space flight can

106
00:05:49,590 --> 00:05:48,639
impact neural function our nervous

107
00:05:52,230 --> 00:05:49,600
system

108
00:05:53,350 --> 00:05:52,240
since then i'm currently a sophomore at

109
00:05:56,070 --> 00:05:53,360
stanford university

110
00:05:58,469 --> 00:05:56,080
studying computer science with an

111
00:06:00,790 --> 00:05:58,479
interest in bio computation

112
00:06:02,550 --> 00:06:00,800
and this summer i actually interned at

113
00:06:05,029 --> 00:06:02,560

nasa's ames research center

114
00:06:05,590 --> 00:06:05,039
with the gene lab group doing work there

115
00:06:09,110 --> 00:06:05,600
so yeah

116
00:06:10,790 --> 00:06:09,120
pleasure to meet you all um hello

117
00:06:12,870 --> 00:06:10,800
as ben sam just mentioned my name is

118
00:06:13,830 --> 00:06:12,880
yuji wang and i work within sam in my

119
00:06:15,990 --> 00:06:13,840
senior year of high school

120
00:06:17,270 --> 00:06:16,000
developing a proposal eventually getting

121
00:06:19,110 --> 00:06:17,280
through to the final stage

122
00:06:20,550 --> 00:06:19,120
and finally getting selected as you saw

123
00:06:22,469 --> 00:06:20,560
in the video

124
00:06:24,390 --> 00:06:22,479
i was really interested in computational

125
00:06:27,110 --> 00:06:24,400
biology in my senior year of high school

126
00:06:27,749 --> 00:06:27,120
and to some degree i still am i am still

127
00:06:30,309 --> 00:06:27,759
doing

128
00:06:31,029 --> 00:06:30,319
computer science actually i'm currently

129
00:06:32,870 --> 00:06:31,039
a sophomore

130
00:06:35,029 --> 00:06:32,880
at uc berkeley studying computer science

131
00:06:36,710 --> 00:06:35,039
and electrical engineering

132
00:06:38,150 --> 00:06:36,720
i am also pretty active in the

133
00:06:40,790 --> 00:06:38,160
space-related sphere

134
00:06:42,230 --> 00:06:40,800
in at uc berkeley i have really i am in

135
00:06:44,070 --> 00:06:42,240
several extracurricular activities

136
00:06:46,070 --> 00:06:44,080
that do space related projects for

137
00:06:46,710 --> 00:06:46,080
example this semester i'll be leading a

138
00:06:49,189 --> 00:06:46,720

project

139
00:06:50,790 --> 00:06:49,199
that is developing a plant growth

140
00:06:54,150 --> 00:06:50,800
chamber for use on the international

141
00:06:58,710 --> 00:06:56,950
okay dr smith can you tell us more about

142
00:07:00,230 --> 00:06:58,720
how they got to the point where their

143
00:07:02,550 --> 00:07:00,240
research is going to be launching to the

144
00:07:05,589 --> 00:07:02,560
international space station

145
00:07:06,230 --> 00:07:05,599
yeah absolutely um so the way the genes

146
00:07:08,390 --> 00:07:06,240
in space

147
00:07:10,150 --> 00:07:08,400
mentoring program um kind of is

148
00:07:11,430 --> 00:07:10,160
conducted is first we get research

149
00:07:13,909 --> 00:07:11,440
proposals from

150
00:07:15,029 --> 00:07:13,919
across the nation and so in this

151
00:07:18,390 --> 00:07:15,039
particular year we had

152
00:07:20,390 --> 00:07:18,400
over 750 different applications and

153
00:07:21,749 --> 00:07:20,400
finsam and yugi's application definitely

154
00:07:23,430 --> 00:07:21,759
stuck out to us as being

155
00:07:25,909 --> 00:07:23,440
incredibly well researched and such a

156
00:07:27,670 --> 00:07:25,919
really novel and interesting idea

157
00:07:29,430 --> 00:07:27,680
and so from that they were they were

158
00:07:30,469 --> 00:07:29,440
picked as a finalist so one of five

159
00:07:32,070 --> 00:07:30,479
groups

160
00:07:34,629 --> 00:07:32,080
and there they were paired with a mentor

161
00:07:37,110 --> 00:07:34,639
who i mentioned before dr dennis adebay

162
00:07:37,830 --> 00:07:37,120
who was getting his phd from mit where

163
00:07:40,870 --> 00:07:37,840

they were to

164
00:07:42,390 --> 00:07:40,880
refine that proposal into a very nice

165
00:07:43,990 --> 00:07:42,400
presentation to present at the

166
00:07:45,350 --> 00:07:44,000
international space station research and

167
00:07:47,749 --> 00:07:45,360
development conference

168
00:07:49,749 --> 00:07:47,759
i mean from that they were chosen as the

169
00:07:51,189 --> 00:07:49,759
winners after doing an incredible job

170
00:07:53,430 --> 00:07:51,199
presenting their research

171
00:07:54,629 --> 00:07:53,440
and outlining how this experiment can

172
00:07:57,510 --> 00:07:54,639
actually be conducted

173
00:07:57,990 --> 00:07:57,520
where they then were working with myself

174
00:08:00,309 --> 00:07:58,000
and again

175
00:08:01,510 --> 00:08:00,319
the greater genesis-based team to

176
00:08:03,430 --> 00:08:01,520
actually

177
00:08:04,629 --> 00:08:03,440
you know refine what model organism

178
00:08:06,309 --> 00:08:04,639
we're going to use

179
00:08:08,950 --> 00:08:06,319
actually conducting an experiment

180
00:08:10,629 --> 00:08:08,960
looking at some of the raw data

181
00:08:14,469 --> 00:08:10,639
and then you know eventually finding

182
00:08:17,909 --> 00:08:16,230
well that's that's super exciting and

183
00:08:18,309 --> 00:08:17,919
you mentioned before that there were

184
00:08:21,830 --> 00:08:18,319
over

185
00:08:24,469 --> 00:08:21,840
700 proposals that theirs was selected

186
00:08:25,110 --> 00:08:24,479
from so what was that moment like for

187
00:08:27,350 --> 00:08:25,120
you

188
00:08:29,270 --> 00:08:27,360

um and this question is more for vincent

189
00:08:31,029 --> 00:08:29,280
and yuji what was that moment like when

190
00:08:32,389 --> 00:08:31,039
you were at that conference and you

191
00:08:34,310 --> 00:08:32,399
heard that your proposal had been

192
00:08:37,350 --> 00:08:34,320
selected

193
00:08:40,389 --> 00:08:37,360
so um i feel that

194
00:08:42,149 --> 00:08:40,399
i um i i was uh actually vincent had

195
00:08:42,949 --> 00:08:42,159
previously gone to uh jeans and space

196
00:08:45,350 --> 00:08:42,959
conference before

197
00:08:46,070 --> 00:08:45,360
because he has been a previous winner um

198
00:08:57,910 --> 00:08:46,080
i

199
00:08:59,910 --> 00:08:57,920
because

200
00:09:01,910 --> 00:08:59,920
people were taking my research seriously

201
00:09:03,910 --> 00:09:01,920
people saw that my proposal had merit

202
00:09:05,910 --> 00:09:03,920
and i also saw that there's this vibrant

203
00:09:07,829 --> 00:09:05,920
community around space related research

204
00:09:10,310 --> 00:09:07,839
and just vibrancy and research in

205
00:09:11,269 --> 00:09:10,320
general and it has sort of inspired me

206
00:09:13,750 --> 00:09:11,279
to go into research

207
00:09:15,590 --> 00:09:13,760
in my freshman year at berkeley i

208
00:09:17,829 --> 00:09:15,600
undertook a research project

209
00:09:19,030 --> 00:09:17,839
in the biosciences department related to

210
00:09:20,470 --> 00:09:19,040
computational biology

211
00:09:22,310 --> 00:09:20,480
and next semester i'll also be looking

212
00:09:24,230 --> 00:09:22,320
for more research opportunities

213
00:09:26,710 --> 00:09:24,240

genes in space has really increased my

214
00:09:29,269 --> 00:09:26,720
confidence and made me

215
00:09:30,870 --> 00:09:29,279
and really made me think about whether

216
00:09:34,389 --> 00:09:30,880
research is a good career path for me

217
00:09:35,430 --> 00:09:34,399
as a computer scientist yeah i would

218
00:09:37,509 --> 00:09:35,440
definitely say that

219
00:09:38,949 --> 00:09:37,519
that moment where our names were called

220
00:09:39,509 --> 00:09:38,959
it was just a mixture of so many

221
00:09:42,790 --> 00:09:39,519
emotions

222
00:09:43,269 --> 00:09:42,800
and that wow this at that point i would

223
00:09:46,389 --> 00:09:43,279
say

224
00:09:49,350 --> 00:09:46,399
for four to six months long effort wow

225
00:09:51,030 --> 00:09:49,360
it has come to fruition and we're gonna

226
00:09:53,430 --> 00:09:51,040
make this a reality it was

227
00:09:54,949 --> 00:09:53,440
uh really a new beginning even though

228
00:09:55,990 --> 00:09:54,959
the launch that's happening on saturday

229
00:09:57,750 --> 00:09:56,000
is also a really

230
00:09:59,990 --> 00:09:57,760
new beginning that we're really excited

231
00:10:03,030 --> 00:10:00,000
to get going um but yeah it was

232
00:10:05,829 --> 00:10:03,040
just a mix of emotions um so much

233
00:10:09,190 --> 00:10:05,839
excitement so much excitement to be had

234
00:10:10,790 --> 00:10:09,200
that day so your

235
00:10:12,150 --> 00:10:10,800
research was going to be conducted by

236
00:10:14,069 --> 00:10:12,160
the astronauts on board the

237
00:10:16,150 --> 00:10:14,079
international space station

238
00:10:20,710 --> 00:10:16,160

are do you have any expectations for

239
00:10:26,389 --> 00:10:23,990
so yeah i can start here i

240
00:10:27,990 --> 00:10:26,399
we our experiment we're basically

241
00:10:28,630 --> 00:10:28,000
establishing a proof of concept we want

242
00:10:31,350 --> 00:10:28,640
to see

243
00:10:31,990 --> 00:10:31,360
what kinds of changes we can notice in

244
00:10:34,790 --> 00:10:32,000
neural tissue

245
00:10:35,590 --> 00:10:34,800
in the nervous system in space and

246
00:10:38,150 --> 00:10:35,600
establish

247
00:10:39,509 --> 00:10:38,160
the methods on the iss the international

248
00:10:44,829 --> 00:10:39,519
space station by which

249
00:10:49,750 --> 00:10:46,870
hey

250
00:10:50,069 --> 00:10:49,760
um yeah i mean i think that's a great

251
00:10:52,790 --> 00:10:50,079
way

252
00:10:54,630 --> 00:10:52,800
to to put it and yeah i think our what's

253
00:10:55,590 --> 00:10:54,640
what's cool is that we've done a lot of

254
00:10:57,990 --> 00:10:55,600
the ground work

255
00:11:00,069 --> 00:10:58,000
uh working in the lab kind of where i've

256
00:11:02,389 --> 00:11:00,079
been conducting my phd work so we do

257
00:11:03,350 --> 00:11:02,399
and because of the system that we're

258
00:11:06,069 --> 00:11:03,360
using we do have

259
00:11:07,110 --> 00:11:06,079
pretty clear hypothesis as to what to

260
00:11:09,430 --> 00:11:07,120
expect

261
00:11:10,630 --> 00:11:09,440
um in terms of the effects of

262
00:11:13,350 --> 00:11:10,640
microgravity

263
00:11:14,870 --> 00:11:13,360

um i think we we have pretty clear you

264
00:11:17,030 --> 00:11:14,880
know or

265
00:11:18,230 --> 00:11:17,040
based on the the findings from previous

266
00:11:19,509 --> 00:11:18,240
experiments we think that

267
00:11:21,509 --> 00:11:19,519
there shouldn't be too much of a

268
00:11:25,190 --> 00:11:21,519
difference or effect of microgravity on

269
00:11:28,310 --> 00:11:26,870
what advice would you give students who

270
00:11:31,509 --> 00:11:28,320
would like to get involved with genes in

271
00:11:37,269 --> 00:11:34,550
so i would i would definitely say

272
00:11:37,590 --> 00:11:37,279
do research on what you're interested in

273
00:11:45,430 --> 00:11:37,600
i

274
00:11:47,509 --> 00:11:45,440
lot of uh

275
00:11:48,630 --> 00:11:47,519
i have read a lot of science articles

276
00:11:50,470 --> 00:11:48,640
pop-tart articles

277
00:11:52,470 --> 00:11:50,480
and ever since i became more seriously

278
00:11:55,030 --> 00:11:52,480
interested in potentially pursuing

279
00:11:56,310 --> 00:11:55,040
a computational biology degree i have

280
00:11:58,230 --> 00:11:56,320
been doing some background research

281
00:12:00,150 --> 00:11:58,240
reading some of the newest literature

282
00:12:01,110 --> 00:12:00,160
all the hottest scientific journals for

283
00:12:03,110 --> 00:12:01,120
example

284
00:12:04,389 --> 00:12:03,120
and i'm sure fin sam has done the same

285
00:12:08,870 --> 00:12:04,399
as

286
00:12:11,030 --> 00:12:08,880
so yeah i would definitely say

287
00:12:12,710 --> 00:12:11,040
um find something you're passionate

288
00:12:14,310 --> 00:12:12,720

about you know see what's out there

289
00:12:16,470 --> 00:12:14,320
see what people are talking about in

290
00:12:16,949 --> 00:12:16,480
science and if something stands out to

291
00:12:18,949 --> 00:12:16,959
you

292
00:12:20,310 --> 00:12:18,959
um pursue it especially if it's

293
00:12:22,870 --> 00:12:20,320
something you're passionate about

294
00:12:24,310 --> 00:12:22,880
find out mentors in science people who

295
00:12:25,990 --> 00:12:24,320
can help guide you

296
00:12:27,910 --> 00:12:26,000
it's people that you can seek advice

297
00:12:31,350 --> 00:12:27,920
from more directly than

298
00:12:34,389 --> 00:12:31,360
um than not just giving you advice but

299
00:12:36,629 --> 00:12:34,399
definitely read read a ton

300
00:12:38,230 --> 00:12:36,639
uh read stuff about things that you're

301
00:12:40,150 --> 00:12:38,240
really passionate in and find

302
00:12:43,829 --> 00:12:40,160
um people that you can that can be your

303
00:12:48,389 --> 00:12:45,670
now vincent you actually did an

304
00:12:51,030 --> 00:12:48,399
internship at nasa ames is that correct

305
00:12:51,990 --> 00:12:51,040
yes what did you do while you were there

306
00:12:54,230 --> 00:12:52,000
yeah i was with

307
00:12:55,350 --> 00:12:54,240
a nasa's gene lab group and they're

308
00:12:57,670 --> 00:12:55,360
essentially

309
00:12:59,750 --> 00:12:57,680
a website but also a repository they

310
00:13:01,990 --> 00:12:59,760
host a lot of space biology data

311
00:13:03,190 --> 00:13:02,000
from research such as our experiment

312
00:13:05,590 --> 00:13:03,200
actually

313
00:13:06,550 --> 00:13:05,600

that was conducted both in on the iss

314
00:13:08,230 --> 00:13:06,560
and in a bunch of

315
00:13:09,829 --> 00:13:08,240
space railroad missions and my work

316
00:13:12,389 --> 00:13:09,839
there was really

317
00:13:14,069 --> 00:13:12,399
bioinformatics work helping uh work

318
00:13:15,829 --> 00:13:14,079
through their data sets and establish

319
00:13:17,509 --> 00:13:15,839
new capabilities for some visualization

320
00:13:19,590 --> 00:13:17,519
tools that they're planning to launch in

321
00:13:22,790 --> 00:13:19,600
the future

322
00:13:24,790 --> 00:13:22,800
yeah well while we're talking about

323
00:13:25,829 --> 00:13:24,800
internships just for those students

324
00:13:27,190 --> 00:13:25,839
watching

325
00:13:29,389 --> 00:13:27,200
if you want to look for opportunities

326
00:13:31,509 --> 00:13:29,399
you can go to intern intern

327
00:13:33,509 --> 00:13:31,519
sorry.nasa.gov and you could the

328
00:13:35,990 --> 00:13:33,519
opportunities will be listed there

329
00:13:37,509 --> 00:13:36,000
so you know you're going to see your

330
00:13:41,990 --> 00:13:37,519
research launch tomorrow

331
00:13:48,389 --> 00:13:45,189
so i'll be watching from home because

332
00:13:49,990 --> 00:13:48,399
uh because my because i uh i really want

333
00:13:52,629 --> 00:13:50,000
to spend this time with my family

334
00:13:53,110 --> 00:13:52,639
to see like this monumental achievement

335
00:13:55,990 --> 00:13:53,120
in my

336
00:13:56,870 --> 00:13:56,000
young life let's just say um i would

337
00:13:59,430 --> 00:13:56,880
probably be

338
00:14:00,230 --> 00:13:59,440

my kid my i have a younger brother and

339
00:14:02,470 --> 00:14:00,240
i'll probably

340
00:14:03,509 --> 00:14:02,480
be right beside him and he will maybe

341
00:14:07,110 --> 00:14:03,519
freak out maybe not

342
00:14:08,710 --> 00:14:07,120
and i'm just i am really really excited

343
00:14:09,750 --> 00:14:08,720
to see how my family reacts to this

344
00:14:11,350 --> 00:14:09,760
achievement

345
00:14:12,949 --> 00:14:11,360
and hopefully they will be encouraging

346
00:14:15,430 --> 00:14:12,959
and they will be just as excited as i am

347
00:14:19,670 --> 00:14:17,910
yes i i would say very similarly i'm

348
00:14:22,710 --> 00:14:19,680
going to be glued to the tv

349
00:14:25,670 --> 00:14:22,720
um or the device that i will watch from

350
00:14:26,470 --> 00:14:25,680
tomorrow um with spending that time with

351
00:14:30,230 --> 00:14:26,480
my family

352
00:14:32,389 --> 00:14:30,240
showing my sister um and yeah

353
00:14:35,509 --> 00:14:32,399
it's gonna be an awesome time really

354
00:14:40,230 --> 00:14:37,189
and i'll be watching from my apartment

355
00:14:42,710 --> 00:14:40,240
in chicago um yeah also glued to the tv

356
00:14:45,030 --> 00:14:42,720
but close to lake michigan so nice

357
00:14:47,509 --> 00:14:45,040
pretty views

358
00:14:48,629 --> 00:14:47,519
well thank you all so much for being

359
00:14:50,629 --> 00:14:48,639
with us today

360
00:14:52,629 --> 00:14:50,639
um we definitely wish you luck in all of

361
00:14:54,550 --> 00:14:52,639
your future endeavors and

362
00:14:56,470 --> 00:14:54,560
what do you plan what does the future

363
00:14:58,230 --> 00:14:56,480

hold for you um

364
00:15:00,230 --> 00:14:58,240
as you you know prepare your sophomore

365
00:15:01,910 --> 00:15:00,240
is now in college

366
00:15:07,509 --> 00:15:01,920
what do you plan on doing once you

367
00:15:11,509 --> 00:15:09,910
great so i would definitely say that i'm

368
00:15:13,269 --> 00:15:11,519
looking forward to any sort of

369
00:15:14,470 --> 00:15:13,279
opportunities out there in space biology

370
00:15:17,829 --> 00:15:14,480
computational biology

371
00:15:21,750 --> 00:15:17,839
and getting involved pursuing

372
00:15:22,069 --> 00:15:21,760
this interest i have in how space flight

373
00:15:23,590 --> 00:15:22,079
can

374
00:15:26,790 --> 00:15:23,600
really impact neural function and just

375
00:15:29,269 --> 00:15:26,800
learning more about that and

376
00:15:30,550 --> 00:15:29,279
advancing the field of health in general

377
00:15:34,150 --> 00:15:30,560
don't have specifics but

378
00:15:34,160 --> 00:15:37,910
pursue that more in the future

379
00:15:41,189 --> 00:15:40,150
yeah along the lines of what fincem says

380
00:15:43,110 --> 00:15:41,199
vincent just said

381
00:15:44,389 --> 00:15:43,120
i am really also really interested in

382
00:15:46,710 --> 00:15:44,399
computational biology

383
00:15:47,670 --> 00:15:46,720
um i think that perhaps um doing this

384
00:15:54,069 --> 00:15:47,680
research

385
00:15:54,870 --> 00:15:54,079
this has been a really positive

386
00:15:57,670 --> 00:15:54,880
experience

387
00:15:59,189 --> 00:15:57,680
as have the previous ones so i'm really

388
00:16:02,710 --> 00:15:59,199

encouraged to pursue

389
00:16:06,470 --> 00:16:02,720
a masters or phd and go further into

390
00:16:09,749 --> 00:16:08,629
once again thank you all for being here

391
00:16:11,749 --> 00:16:09,759
with us today

392
00:16:13,430 --> 00:16:11,759
and thank all of you who are have

393
00:16:16,150 --> 00:16:13,440
watched us and been with us for

394
00:16:18,949 --> 00:16:16,160
each of our segments this is the end of

395
00:16:20,790 --> 00:16:18,959
the nasa virtual crew one social

396
00:16:22,150 --> 00:16:20,800
we hope you will join us on launch day

397
00:16:25,189 --> 00:16:22,160
during the live broadcast

398
00:16:27,269 --> 00:16:25,199
coverage it is at nasa.gov