



AbGradCon 2018

1
00:00:00,260 --> 00:00:11,440

[Music]

2
00:00:16,430 --> 00:00:13,879

so again thank you all for being here

3
00:00:19,100 --> 00:00:16,440

thanks to our panelists also we have

4
00:00:21,170 --> 00:00:19,110

some gifts for you at the end but thank

5
00:00:23,780 --> 00:00:21,180

you very much for coming I'll do a brief

6
00:00:26,060 --> 00:00:23,790

intro for everybody here so dr. Jennifer

7
00:00:27,170 --> 00:00:26,070

glass is an assistant professor here at

8
00:00:30,260 --> 00:00:27,180

the school of Earth and Atmospheric

9
00:00:32,209 --> 00:00:30,270

Sciences jezzter Bachelors of Science in

10
00:00:35,569 --> 00:00:32,219

both oceanography and Earth and Space

11
00:00:38,240 --> 00:00:35,579

Sciences she did for her PhD at Arizona

12
00:00:39,650 --> 00:00:38,250

State and geological sciences and she

13
00:00:43,040 --> 00:00:39,660

postdoc at Caltech

14

00:00:44,660 --> 00:00:43,050

dr. manna Stockton had four Bachelors of

15

00:00:46,840 --> 00:00:44,670

Science in chemistry and aerospace

16

00:00:49,250 --> 00:00:46,850

engineering master's in chemistry

17

00:00:52,819 --> 00:00:49,260

doctorate in chemistry from Berkeley and

18

00:00:54,080 --> 00:00:52,829

she postdoc at JPL she's mrs. a

19

00:00:56,630 --> 00:00:54,090

professor here in the School of

20

00:01:00,319 --> 00:00:56,640

Chemistry with a dual appointment at the

21

00:01:03,470 --> 00:01:00,329

bioengineering program and dr. Susannah

22

00:01:05,719 --> 00:01:03,480

whiticus Weaver who had her Bachelors of

23

00:01:08,090 --> 00:01:05,729

Science in chemistry at Illinois

24

00:01:11,450 --> 00:01:08,100

Wesleyan her doctorate of chemistry at

25

00:01:14,420 --> 00:01:11,460

Caltech and a postdoc at University of

26

00:01:16,399 --> 00:01:14,430

Illinois urbana-champaign and she's

27

00:01:19,880 --> 00:01:16,409

currently at Emory in the School of

28

00:01:23,359 --> 00:01:19,890

Chemistry so I thought we'd do an

29

00:01:25,670 --> 00:01:23,369

icebreaker first so if each of you could

30

00:01:27,410 --> 00:01:25,680

answer if there was a high impact

31

00:01:33,109 --> 00:01:27,420

Journal of negative results what would

32

00:01:34,730 --> 00:01:33,119

be your most cited paper so luckily they

33

00:01:36,350 --> 00:01:34,740

gave us these questions ahead of time so

34

00:01:42,350 --> 00:01:36,360

I thought about this for last couple

35

00:01:45,710 --> 00:01:42,360

days so I would have a lot from my own

36

00:01:49,460 --> 00:01:45,720

experiments but they said most highly

37

00:01:52,280 --> 00:01:49,470

cited which is always review papers so I

38

00:01:54,920 --> 00:01:52,290

would write a review paper on all the

39

00:01:57,320 --> 00:01:54,930

sources of contamination in different

40

00:02:00,289 --> 00:01:57,330

experiments that people should be aware

41

00:02:02,990 --> 00:02:00,299

of even like their lab water and things

42

00:02:05,510 --> 00:02:03,000

like that and also perhaps a table of

43

00:02:07,219 --> 00:02:05,520

prominent studies that have been shown

44

00:02:10,009 --> 00:02:07,229

to be artifacts some that we know

45

00:02:12,410 --> 00:02:10,019

something that we aren't as infamous or

46

00:02:14,059 --> 00:02:12,420

famous so I think that would get a lot

47

00:02:18,620 --> 00:02:14,069

of citations it would get a lot of hate

48

00:02:31,130 --> 00:02:18,630

to but it wouldn't so citation would you

49

00:02:33,949 --> 00:02:31,140

please help along those lines as an

50

00:02:36,110 --> 00:02:33,959

analytical chemist there's a lot of ways

51
00:02:38,479 --> 00:02:36,120
you can try to make something work and

52
00:02:40,160 --> 00:02:38,489
have it not work and it turns out that

53
00:02:41,750 --> 00:02:40,170
if you don't publish the ways it doesn't

54
00:02:43,970 --> 00:02:41,760
work more and more grad students are

55
00:02:46,970 --> 00:02:43,980
gonna waste their time trying those ways

56
00:02:48,470 --> 00:02:46,980
again and again so I think the list of

57
00:02:50,660 --> 00:02:48,480
all of the different reagents that don't

58
00:02:52,790 --> 00:02:50,670
result in very good any kc separations

59
00:03:00,250 --> 00:02:52,800
of carboxylic acids would be a pretty

60
00:03:03,640 --> 00:03:00,260
good one mine's actually a real paper I

61
00:03:08,600 --> 00:03:03,650
have tenure I can say these things now

62
00:03:10,759 --> 00:03:08,610
so the big result from my PhD thesis was

63
00:03:13,600 --> 00:03:10,769

a tentative detection of an interstellar

64

00:03:16,520 --> 00:03:13,610

molecule and it was the first key toast

65

00:03:17,600 --> 00:03:16,530

potentially detected in space we wrote

66

00:03:19,699 --> 00:03:17,610

it very carefully

67

00:03:21,020 --> 00:03:19,709

we hedged our bets we said it was

68

00:03:23,390 --> 00:03:21,030

tentative we did all the right things

69

00:03:25,309 --> 00:03:23,400

and then another group followed up a

70

00:03:27,140 --> 00:03:25,319

couple of years later and published more

71

00:03:30,259 --> 00:03:27,150

observations that showed that it wasn't

72

00:03:32,360 --> 00:03:30,269

there and people thought I would be

73

00:03:33,890 --> 00:03:32,370

devastated because they thought this was

74

00:03:36,890 --> 00:03:33,900

like the centerpiece of my thesis

75

00:03:39,259 --> 00:03:36,900

project but in astrochemistry if you're

76
00:03:41,270 --> 00:03:39,269
looking for a new molecule in space you

77
00:03:42,680 --> 00:03:41,280
basically keep looking line by line by

78
00:03:44,570 --> 00:03:42,690
line until there's one that's missing

79
00:03:47,330 --> 00:03:44,580
and then you know it's not really the

80
00:03:50,300 --> 00:03:47,340
molecule that you thought it was and so

81
00:03:52,699 --> 00:03:50,310
this is not unusual in this field but I

82
00:03:54,530 --> 00:03:52,709
think probably my most highly cited

83
00:03:57,290 --> 00:03:54,540
negative result is one that was actually

84
00:04:00,670 --> 00:03:57,300
published and turned out to not be

85
00:04:04,490 --> 00:04:00,680
correct so there you go

86
00:04:06,320 --> 00:04:04,500
very much so the first real question I

87
00:04:09,320 --> 00:04:06,330
guess so could you point to a couple of

88
00:04:11,330 --> 00:04:09,330

key decisions in your career while you

89
00:04:14,210 --> 00:04:11,340
made those and what would have happened

90
00:04:18,890 --> 00:04:14,220
you didn't make them so the inflection

91
00:04:21,559 --> 00:04:18,900
points in your early career okay so I

92
00:04:26,059 --> 00:04:21,569
think for me the first thing is that I

93
00:04:28,390 --> 00:04:26,069
was willing to change fields a lot as

94
00:04:31,379 --> 00:04:28,400
you heard all my degrees are in GL

95
00:04:35,219 --> 00:04:31,389
and yet I really feel more like a

96
00:04:39,700 --> 00:04:35,229
microbiologist at this point dabbling in

97
00:04:42,520 --> 00:04:39,710
biochemistry as well and so I think the

98
00:04:44,740 --> 00:04:42,530
interdisciplinary aspect of you know

99
00:04:47,409 --> 00:04:44,750
starting out in geology and isotope

100
00:04:49,810 --> 00:04:47,419
geochemistry and then I switched in you

101
00:04:51,760 --> 00:04:49,820
know to work on cyanobacteria and

102
00:04:55,689 --> 00:04:51,770
nitrogen fixation and I switched again

103
00:04:58,150 --> 00:04:55,699
to work on methane in the deep sea and

104
00:05:00,760 --> 00:04:58,160
then you know starting my own lab I've

105
00:05:04,180 --> 00:05:00,770
obviously switched into a lot of

106
00:05:07,150 --> 00:05:04,190
offshoots of that as well that I think

107
00:05:10,180 --> 00:05:07,160
would be a key decision definitely or

108
00:05:13,420 --> 00:05:10,190
just a key kind of passion I guess I'm

109
00:05:16,600 --> 00:05:13,430
kind of as if you know me you know I'm a

110
00:05:19,029 --> 00:05:16,610
little issues with focus and ADHD and

111
00:05:20,560 --> 00:05:19,039
you know just I love to think about a

112
00:05:23,950 --> 00:05:20,570
lot of things at once for better or

113
00:05:25,540 --> 00:05:23,960

worse and so I think I would have done

114

00:05:27,760 --> 00:05:25,550

that anyway I'm just that's my

115

00:05:29,409 --> 00:05:27,770

personality but I think that in some

116

00:05:31,480 --> 00:05:29,419

ways that really has benefitted me

117

00:05:33,610 --> 00:05:31,490

although at other times it was really

118

00:05:36,580 --> 00:05:33,620

good to focus to get through grad school

119

00:05:38,440 --> 00:05:36,590

things like that and something I want to

120

00:05:40,089 --> 00:05:38,450

throw out there because this is a lot

121

00:05:42,190 --> 00:05:40,099

about graduate school and I know that

122

00:05:44,320 --> 00:05:42,200

mental health comes up a lot and I think

123

00:05:47,589 --> 00:05:44,330

a key decision I made early on in grad

124

00:05:49,900 --> 00:05:47,599

school was to seek help for my anxiety

125

00:05:52,150 --> 00:05:49,910

and depression which is so prevalent and

126
00:05:55,510 --> 00:05:52,160
I had issues with that as well and and

127
00:05:56,800 --> 00:05:55,520
still do it's a lifelong you know

128
00:06:00,159 --> 00:05:56,810
lifelong thing as many of you probably

129
00:06:02,350 --> 00:06:00,169
know so I think that was very key was

130
00:06:04,900 --> 00:06:02,360
seeking seeking help and continuing to

131
00:06:13,990 --> 00:06:04,910
seek help so I can talk more about that

132
00:06:18,250 --> 00:06:14,000
anybody wants I have kind of similar key

133
00:06:20,740 --> 00:06:18,260
points as Jen here having also a number

134
00:06:22,480 --> 00:06:20,750
of different backgrounds that don't

135
00:06:24,969 --> 00:06:22,490
necessarily correlate directly with what

136
00:06:27,969 --> 00:06:24,979
I do today with a undergraduate degree

137
00:06:29,980 --> 00:06:27,979
in aerospace engineering but needing to

138
00:06:31,960 --> 00:06:29,990

know some geology and microbiology at

139

00:06:33,580 --> 00:06:31,970

this point without having necessarily

140

00:06:34,360 --> 00:06:33,590

taken any biology classes since high

141

00:06:37,290 --> 00:06:34,370

school

142

00:06:39,370 --> 00:06:37,300

there's been a lot of ongoing learning

143

00:06:41,500 --> 00:06:39,380

one thing that I would like to point out

144

00:06:44,450 --> 00:06:41,510

is that

145

00:06:46,700 --> 00:06:44,460

from where you're at now to where you

146

00:06:49,670 --> 00:06:46,710

want to be there are many different

147

00:06:51,950 --> 00:06:49,680

paths and you can take any number of

148

00:06:53,330 --> 00:06:51,960

those paths as long as you keep option

149

00:06:55,550 --> 00:06:53,340

open

150

00:06:58,370 --> 00:06:55,560

I originally thought that my end goal

151

00:07:01,550 --> 00:06:58,380

was to work at JPL and send stuff to

152

00:07:05,120 --> 00:07:01,560

Mars but once I got to JPL I realized my

153

00:07:07,070 --> 00:07:05,130

true passion included that early-stage

154

00:07:10,850 --> 00:07:07,080

development that you can really only do

155

00:07:14,090 --> 00:07:10,860

easily in academia a place like a NASA

156

00:07:16,100 --> 00:07:14,100

center is great for higher TRL

157

00:07:18,080 --> 00:07:16,110

development but that super cutting edge

158

00:07:20,300 --> 00:07:18,090

high-risk high-reward development is a

159

00:07:22,270 --> 00:07:20,310

much more easily a tackle from an

160

00:07:27,980 --> 00:07:22,280

academic environment

161

00:07:33,560 --> 00:07:27,990

another thing is changing paths is not

162

00:07:35,270 --> 00:07:33,570

failure I started with a ph.d program at

163

00:07:36,980 --> 00:07:35,280

Brown University and pharmaceutical

164

00:07:39,530 --> 00:07:36,990

chemistry which was not what I wanted to

165

00:07:41,960 --> 00:07:39,540

be doing but I thought that I wanted to

166

00:07:44,480 --> 00:07:41,970

do that changing my mind and leaving

167

00:07:47,300 --> 00:07:44,490

with a master's was not failure

168

00:07:48,680 --> 00:07:47,310

it was a redirection towards what I

169

00:07:52,900 --> 00:07:48,690

actually wanted to do and don't be

170

00:07:58,130 --> 00:07:55,580

if you are interested in something

171

00:07:59,990 --> 00:07:58,140

pursue it I originally was only

172

00:08:02,060 --> 00:08:00,000

interested in aerospace engineering I

173

00:08:03,800 --> 00:08:02,070

got distracted by chemistry it is what

174

00:08:05,720 --> 00:08:03,810

has given me the opportunity to have the

175

00:08:09,680 --> 00:08:05,730

career that I have today if you are

176

00:08:12,110 --> 00:08:09,690

interested in it go for it and make it

177

00:08:13,340 --> 00:08:12,120

work in the long run and then finally

178

00:08:16,610 --> 00:08:13,350

along the lines of what Jen was saying

179

00:08:20,900 --> 00:08:16,620

about mental health find something

180

00:08:23,570 --> 00:08:20,910

outside of your day job that you

181

00:08:25,300 --> 00:08:23,580

actually enjoy doing your best creative

182

00:08:28,130 --> 00:08:25,310

moments will likely come out of

183

00:08:33,290 --> 00:08:28,140

exploring those other creative avenues

184

00:08:34,940 --> 00:08:33,300

in your brain there are so many pivotal

185

00:08:37,130 --> 00:08:34,950

points in my career that I could point

186

00:08:38,990 --> 00:08:37,140

to that were turning points for me and

187

00:08:42,409 --> 00:08:39,000

we could be here all day so I won't do

188

00:08:44,089 --> 00:08:42,419

that but I can say that the decision

189

00:08:47,150 --> 00:08:44,099

that I made between graduate school when

190

00:08:50,120 --> 00:08:47,160

my postdoc position was huge I also

191

00:08:52,220 --> 00:08:50,130

thought I wanted a job at NASA I

192

00:08:54,920 --> 00:08:52,230

actually went to Caltech in grad school

193

00:08:55,130 --> 00:08:54,930

I went to the JPL spectroscopy group and

194

00:08:58,190 --> 00:08:55,140

did

195

00:09:00,440 --> 00:08:58,200

a lot of my laboratory work in graduate

196

00:09:02,240 --> 00:09:00,450

school I knew them very well I saw their

197

00:09:04,400 --> 00:09:02,250

day-to-day activities and I thought this

198

00:09:06,620 --> 00:09:04,410

is great I could get a job at a NASA lab

199

00:09:08,960 --> 00:09:06,630

I wasn't sure I wanted to teach and so

200

00:09:11,090 --> 00:09:08,970

this seemed like the best fit for me

201
00:09:12,920 --> 00:09:11,100
and then sometime around my fourth year

202
00:09:15,500 --> 00:09:12,930
in graduate school I realized I actually

203
00:09:18,290 --> 00:09:15,510
really enjoyed teaching and I also

204
00:09:20,750 --> 00:09:18,300
started to talk to my friends at JPL and

205
00:09:22,790 --> 00:09:20,760
realized that to have the academic

206
00:09:25,280 --> 00:09:22,800
freedom to work on the science I really

207
00:09:29,240 --> 00:09:25,290
wanted to work on I needed a different

208
00:09:31,610 --> 00:09:29,250
job than a job at a NASA lab you can

209
00:09:34,760 --> 00:09:31,620
tailor a job at a NASA lab to give you

210
00:09:36,290 --> 00:09:34,770
that freedom but it's somewhat

211
00:09:38,260 --> 00:09:36,300
challenging to work yourself into the

212
00:09:40,520 --> 00:09:38,270
right level of position to have that

213
00:09:42,650 --> 00:09:40,530

when you're first starting out in

214

00:09:44,630 --> 00:09:42,660

particular you typically are given a

215

00:09:46,790 --> 00:09:44,640

project related to a mission or a

216

00:09:48,500 --> 00:09:46,800

contract and that's what you have to

217

00:09:50,690 --> 00:09:48,510

work on and so when I would go to visit

218

00:09:53,420 --> 00:09:50,700

the lab at JPL they would have their

219

00:09:54,800 --> 00:09:53,430

NASA job from 9 to 5 and then they'd eat

220

00:09:56,450 --> 00:09:54,810

dinner and then they'd stay late and

221

00:09:58,970 --> 00:09:56,460

work on their own research after hours

222

00:10:01,310 --> 00:09:58,980

and I realized at that point that I

223

00:10:03,200 --> 00:10:01,320

didn't want that sort of life for myself

224

00:10:05,570 --> 00:10:03,210

that I wanted the freedom to work on

225

00:10:08,150 --> 00:10:05,580

whatever science interested me at

226

00:10:10,040 --> 00:10:08,160

whatever time I wanted to work on it so

227

00:10:11,810 --> 00:10:10,050

I ended up going into academia for two

228

00:10:14,240 --> 00:10:11,820

reasons one I actually really did like

229

00:10:16,580 --> 00:10:14,250

teaching and two because I realized that

230

00:10:19,580 --> 00:10:16,590

that best fit with what I needed

231

00:10:21,080 --> 00:10:19,590

career-wise in terms of allowing me the

232

00:10:24,200 --> 00:10:21,090

chance to do the things that I wanted to

233

00:10:25,310 --> 00:10:24,210

do and I was sitting here thinking I

234

00:10:28,490 --> 00:10:25,320

hadn't thought about the mental health

235

00:10:30,410 --> 00:10:28,500

aspect in relation to this question but

236

00:10:32,870 --> 00:10:30,420

I will say another major turning point

237

00:10:35,300 --> 00:10:32,880

for me was when I was a postdoc I was

238

00:10:36,710 --> 00:10:35,310

struggling with life choices being a

239

00:10:38,390 --> 00:10:36,720

research academic is really challenging

240

00:10:38,810 --> 00:10:38,400

I was getting ready to go in the job

241

00:10:42,800 --> 00:10:38,820

market

242

00:10:45,140 --> 00:10:42,810

I wasn't sure I could do it imposter

243

00:10:47,360 --> 00:10:45,150

syndrome was real if you don't know what

244

00:10:49,700 --> 00:10:47,370

that phrase means look it up I guarantee

245

00:10:52,460 --> 00:10:49,710

everyone in this room has experienced

246

00:10:55,340 --> 00:10:52,470

this at least once in your life probably

247

00:10:58,430 --> 00:10:55,350

has grad students on a daily basis the

248

00:11:00,580 --> 00:10:58,440

deep secret of academic research is

249

00:11:04,070 --> 00:11:00,590

professors still have impostor syndrome

250

00:11:06,140 --> 00:11:04,080

even after they get tenure almost every

251

00:11:08,450 --> 00:11:06,150

day it's normal

252

00:11:10,460 --> 00:11:08,460

there are ways to deal with it

253

00:11:12,080 --> 00:11:10,470

you can do it you just have to tell

254

00:11:13,910 --> 00:11:12,090

yourself you can do it and try anyway

255

00:11:15,680 --> 00:11:13,920

and ignore the little voice in your head

256

00:11:18,460 --> 00:11:15,690

that says that you're a fraud and

257

00:11:21,890 --> 00:11:18,470

they're all gonna figure you out so

258

00:11:24,110 --> 00:11:21,900

along with taking care of yourself in

259

00:11:26,060 --> 00:11:24,120

terms of mental health remind yourself

260

00:11:27,830 --> 00:11:26,070

that you got into grad school for a

261

00:11:29,990 --> 00:11:27,840

reason you are a very talented

262

00:11:31,670 --> 00:11:30,000

individual and you can do the things

263

00:11:37,060 --> 00:11:31,680

that you set out to do in your career

264

00:11:42,620 --> 00:11:38,990

maybe some people should have more

265

00:11:45,770 --> 00:11:42,630

imposter syndrome so what do you think

266

00:11:47,480 --> 00:11:45,780

the grad students often miss that they

267

00:11:52,940 --> 00:11:47,490

should be taking more note up at this

268

00:11:58,550 --> 00:11:52,950

point and everyone's alright

269

00:12:01,250 --> 00:11:58,560

I said I think that the importance of

270

00:12:03,170 --> 00:12:01,260

becoming very comfortable with rejection

271

00:12:08,150 --> 00:12:03,180

and failure that's something that's come

272

00:12:11,000 --> 00:12:08,160

up and along with that seeking out

273

00:12:12,740 --> 00:12:11,010

constructive criticism because you've

274

00:12:15,650 --> 00:12:12,750

all heard this many times probably

275

00:12:17,870 --> 00:12:15,660

you're all type all of your type a but a

276

00:12:21,740 --> 00:12:17,880

lot of your type a I'm type a you know

277

00:12:26,870 --> 00:12:21,750

um and or at least I I was before I just

278

00:12:30,590 --> 00:12:26,880

got so couldn't be as organized as I

279

00:12:32,120 --> 00:12:30,600

originally was I have more time but you

280

00:12:34,610 --> 00:12:32,130

know we all have very high expectations

281

00:12:36,620 --> 00:12:34,620

for ourselves and we were all probably

282

00:12:38,090 --> 00:12:36,630

really good students got good grades and

283

00:12:40,970 --> 00:12:38,100

all these things right

284

00:12:43,250 --> 00:12:40,980

and then it becomes much more about

285

00:12:44,960 --> 00:12:43,260

these bigger things obviously than the

286

00:12:47,210 --> 00:12:44,970

grades right the grades don't matter

287

00:12:49,550 --> 00:12:47,220

anymore and you're not even in classes

288

00:12:52,730 --> 00:12:49,560

anymore after you go through comps right

289

00:12:54,790 --> 00:12:52,740

and so then suddenly it's the papers and

290

00:12:57,980 --> 00:12:54,800

the fellowships and these much bigger

291

00:13:00,470 --> 00:12:57,990

kind of amorphous things that are very

292

00:13:03,290 --> 00:13:00,480

very competitive with like 5% success

293

00:13:06,320 --> 00:13:03,300

rates or something and so it's very hard

294

00:13:09,740 --> 00:13:06,330

and I think that's where even if you are

295

00:13:12,110 --> 00:13:09,750

in a program with great support and you

296

00:13:16,060 --> 00:13:12,120

know let alone all the other pressures

297

00:13:19,340 --> 00:13:16,070

that are on a lot of people outside of

298

00:13:21,410 --> 00:13:19,350

academia but you know or inside academia

299

00:13:23,509 --> 00:13:21,420

unfortunately anyway talk more about

300

00:13:25,490 --> 00:13:23,519

that but

301

00:13:27,319 --> 00:13:25,500

you know getting getting used to it's

302

00:13:29,000 --> 00:13:27,329

gonna be a very low success rate and

303

00:13:31,310 --> 00:13:29,010

it's very competitive and so you just

304

00:13:33,170 --> 00:13:31,320

gotta now I kind of I kind of joked that

305

00:13:34,879 --> 00:13:33,180

now I just always expect everything's

306

00:13:37,250 --> 00:13:34,889

gonna be rejected and then I'm like oh

307

00:13:40,220 --> 00:13:37,260

wow it wasn't rejected or it was only

308

00:13:42,650 --> 00:13:40,230

you're ejected but it's encouraged to be

309

00:13:46,519 --> 00:13:42,660

resubmitted that's like awesome because

310

00:13:48,290 --> 00:13:46,529

I expected it to be rejected with no

311

00:13:50,930 --> 00:13:48,300

encouragement for me that's what I hope

312

00:13:53,240 --> 00:13:50,940

that's my go-to a priori things then

313

00:13:56,300 --> 00:13:53,250

everything I tell that time in my labs

314

00:13:58,850 --> 00:13:56,310

they were done for a bit and same with

315

00:14:00,439 --> 00:13:58,860

grants so you know so then it really

316

00:14:06,650 --> 00:14:00,449

does that's how I tricked myself into

317

00:14:10,310 --> 00:14:06,660

kind of more excited about everything so

318

00:14:12,470 --> 00:14:10,320

because I'll tell you story so I was re

319

00:14:14,120 --> 00:14:12,480

on bars some of you know him I was his

320

00:14:16,550 --> 00:14:14,130

student so I think he's heard the story

321

00:14:20,210 --> 00:14:16,560

if not if he's watching I think he's

322

00:14:23,210 --> 00:14:20,220

right but my first paper to get rejected

323

00:14:25,129 --> 00:14:23,220

I think it was like my first paper

324

00:14:27,259 --> 00:14:25,139

maybe second paper in grad school and

325

00:14:30,350 --> 00:14:27,269

then I got like three rejected in a row

326

00:14:32,300 --> 00:14:30,360

and I each one and it was really kind of

327

00:14:34,160 --> 00:14:32,310

back-to-back like with every six months

328

00:14:35,990 --> 00:14:34,170

it was happening and I just did the

329

00:14:39,530 --> 00:14:36,000

completely wrong thing like I didn't

330

00:14:41,569 --> 00:14:39,540

tell aural for months because it came to

331

00:14:44,900 --> 00:14:41,579

my email and I was like so embarrassed

332

00:14:47,420 --> 00:14:44,910

about it and so just anxious and just

333

00:14:49,730 --> 00:14:47,430

terrified that I just didn't tell him

334

00:14:52,819 --> 00:14:49,740

for months and don't do that just that's

335

00:14:55,759 --> 00:14:52,829

the thing about about finally he was

336

00:14:59,449 --> 00:14:55,769

like he's like whatever happened with

337

00:15:05,000 --> 00:14:59,459

that paper he was tenured obviously at

338

00:15:07,189 --> 00:15:05,010

this point and I said yeah about that it

339

00:15:09,470 --> 00:15:07,199

got rejected he's like it's been a long

340

00:15:15,680 --> 00:15:09,480

time I'm like he's like when did they

341

00:15:17,090 --> 00:15:15,690

get rejected I'm like and he's like Jen

342

00:15:20,150 --> 00:15:17,100

you have to tell me these things you

343

00:15:22,040 --> 00:15:20,160

know I could I could you know if it was

344

00:15:23,930 --> 00:15:22,050

really depending on how the reviews were

345

00:15:25,579 --> 00:15:23,940

you know I could contact the editor and

346

00:15:27,050 --> 00:15:25,589

usually those things don't go through

347

00:15:28,579 --> 00:15:27,060

and you don't want to bug editors about

348

00:15:30,920 --> 00:15:28,589

things you don't want your advisors to

349

00:15:32,540 --> 00:15:30,930

bug most editors about things but you do

350

00:15:34,610 --> 00:15:32,550

want you know your advisor is your

351

00:15:36,300 --> 00:15:34,620

advisor and they want to help you or

352

00:15:37,860 --> 00:15:36,310

most of them well

353

00:15:39,780 --> 00:15:37,870

stephane really do want to help you and

354

00:15:41,519 --> 00:15:39,790

so use them for that and really do ask

355

00:15:43,950 --> 00:15:41,529

for their opinion even if you think that

356

00:15:46,290 --> 00:15:43,960

you know you know what you're doing they

357

00:15:51,450 --> 00:15:46,300

know they've been in this longer and

358

00:15:53,430 --> 00:15:51,460

they they will help you through it so or

359

00:15:54,720 --> 00:15:53,440

ask other grad students or you know

360

00:15:57,480 --> 00:15:54,730

other people on your committee or

361

00:15:59,450 --> 00:15:57,490

something I know there's some you know

362

00:16:03,240 --> 00:15:59,460

sometimes there are some advisor issues

363

00:16:05,250 --> 00:16:03,250

but ask somebody for help and seek out

364

00:16:11,340 --> 00:16:05,260

constructive criticism kind of a long

365

00:16:13,590 --> 00:16:11,350

story sorry there I like that I started

366

00:16:16,260 --> 00:16:13,600

off from day one every proposal with the

367

00:16:17,670 --> 00:16:16,270

10% acceptance rate of course everything

368

00:16:20,430 --> 00:16:17,680

that you said you you watch it fly away

369

00:16:28,950 --> 00:16:20,440

and it's gone and if it comes back

370

00:16:31,440 --> 00:16:28,960

that's awesome alright so what do I

371

00:16:37,190 --> 00:16:31,450

think graduate students often miss you

372

00:16:40,350 --> 00:16:37,200

should start networking like right now I

373

00:16:44,400 --> 00:16:40,360

have a kind of a story to go along with

374

00:16:47,610 --> 00:16:44,410

this also basically I got my postdoc

375

00:16:50,070 --> 00:16:47,620

position because I had developed a

376

00:16:52,950 --> 00:16:50,080

network already with the team at JPL

377

00:16:56,520 --> 00:16:52,960

that was doing similar things to what my

378

00:16:59,010 --> 00:16:56,530

PhD was doing and it turned out that we

379

00:17:02,250 --> 00:16:59,020

needed someone to go transfer technology

380

00:17:03,870 --> 00:17:02,260

from Berkeley through JPL and so my boss

381

00:17:05,699 --> 00:17:03,880

was on the phone with one of the guys at

382

00:17:15,329 --> 00:17:05,709

JPL and I was like hey that's gonna be

383

00:17:17,669 --> 00:17:15,339

me the postdoc okay and then after that

384

00:17:20,490 --> 00:17:17,679

I was working at JPL in the clean rooms

385

00:17:23,130 --> 00:17:20,500

and it turned out that whenever we had a

386

00:17:24,960 --> 00:17:23,140

process that would fail at our clean

387

00:17:28,770 --> 00:17:24,970

rooms we would send it to Georgia Tech

388

00:17:30,180 --> 00:17:28,780

to be done in the clean rooms here so

389

00:17:32,040 --> 00:17:30,190

whenever I heard that they were looking

390

00:17:34,980 --> 00:17:32,050

for a professor doing kind of like what

391

00:17:37,410 --> 00:17:34,990

I wanted to do it was kind of a

392

00:17:40,230 --> 00:17:37,420

no-brainer like yes pick me I want to

393

00:17:42,840 --> 00:17:40,240

work at those clean rooms so that

394

00:17:44,700 --> 00:17:42,850

network that you develop is is really

395

00:17:47,430 --> 00:17:44,710

important I'll let you talking about

396

00:17:49,080 --> 00:17:47,440

that networking I think is the number

397

00:17:50,200 --> 00:17:49,090

one thing and I know it's really

398

00:17:52,960 --> 00:17:50,210

intimidating as

399

00:17:55,149 --> 00:17:52,970

student to just walk up to somebody at a

400

00:17:56,440 --> 00:17:55,159

conference and introduce yourself but

401
00:17:59,950 --> 00:17:56,450
it's the best thing you could possibly

402
00:18:01,659 --> 00:17:59,960
do for your career because if you see

403
00:18:03,340 --> 00:18:01,669
these people at multiple conferences

404
00:18:05,409 --> 00:18:03,350
they start to remember who you are and

405
00:18:08,230 --> 00:18:05,419
then when they see you give a talk they

406
00:18:10,570 --> 00:18:08,240
remember your science and this develops

407
00:18:13,990 --> 00:18:10,580
into a group of people who can support

408
00:18:16,149 --> 00:18:14,000
you for the rest of your career one of

409
00:18:18,220 --> 00:18:16,159
my colleagues at Emory told me after I

410
00:18:20,529 --> 00:18:18,230
started there that one of the things

411
00:18:22,840 --> 00:18:20,539
they really liked about my application

412
00:18:24,490 --> 00:18:22,850
was the fact that based on the letters

413
00:18:26,080 --> 00:18:24,500

they could tell I had the networking

414

00:18:28,180 --> 00:18:26,090

level of somebody that was already

415

00:18:30,940 --> 00:18:28,190

tenured because astrochemistry is a

416

00:18:32,110 --> 00:18:30,950

pretty small field and I had gone to all

417

00:18:34,659 --> 00:18:32,120

the meetings I had met all the people

418

00:18:36,190 --> 00:18:34,669

they knew me they knew my work and so

419

00:18:38,350 --> 00:18:36,200

when I was on the job market people

420

00:18:40,419 --> 00:18:38,360

could call up someone related to

421

00:18:42,669 --> 00:18:40,429

astrochemistry and ask them about me and

422

00:18:45,190 --> 00:18:42,679

they all knew my name and that is

423

00:18:47,769 --> 00:18:45,200

absolutely the most important thing that

424

00:18:49,149 --> 00:18:47,779

you can do the other part I guess that I

425

00:18:50,049 --> 00:18:49,159

would say for this question is be

426

00:18:53,620 --> 00:18:50,059

meticulous

427

00:18:55,720 --> 00:18:53,630

quadruple check all of your work if it's

428

00:18:58,360 --> 00:18:55,730

going to be deposited somewhere

429

00:19:01,120 --> 00:18:58,370

permanently you want to make sure that

430

00:19:03,039 --> 00:19:01,130

it's right so check your slides for

431

00:19:04,930 --> 00:19:03,049

conference talks check your papers and

432

00:19:07,360 --> 00:19:04,940

if you make a mistake admit you make a

433

00:19:08,860 --> 00:19:07,370

mistake and correct it and you'll get a

434

00:19:11,169 --> 00:19:08,870

lot of respect from people in the field

435

00:19:16,240 --> 00:19:11,179

for that for admitting when you mess up

436

00:19:17,950 --> 00:19:16,250

everybody messes up it's okay and don't

437

00:19:22,960 --> 00:19:17,960

wait three months to tell you adviser

438

00:19:24,880 --> 00:19:22,970

that your paper got rejected okay good

439

00:19:26,799 --> 00:19:24,890

so could you sum up your career advice

440

00:19:28,840 --> 00:19:26,809

in a couple of sentences so if you had

441

00:19:30,700 --> 00:19:28,850

to roll all of that into a couple of

442

00:19:36,519 --> 00:19:30,710

sentences a nice little tootsie roll of

443

00:19:38,230 --> 00:19:36,529

goodness what would it be all right this

444

00:19:40,419 --> 00:19:38,240

is just something that I have to say

445

00:19:42,940 --> 00:19:40,429

that that I'll just answer the question

446

00:19:46,680 --> 00:19:42,950

with just don't read anything into

447

00:19:49,000 --> 00:19:46,690

emails it's very tempting Jubilee nice

448

00:19:51,389 --> 00:19:49,010

psychoanalyse every one of our ale on

449

00:19:55,510 --> 00:19:51,399

bars emails for five years

450

00:19:58,120 --> 00:19:55,520

w and just don't it's not worth it it's

451
00:20:00,100 --> 00:19:58,130
they don't ever mean what you think they

452
00:20:01,930 --> 00:20:00,110
mean like in the tone that do you think

453
00:20:03,970 --> 00:20:01,940
they mean it's just email it's just such

454
00:20:06,340 --> 00:20:03,980
a difficult form of communication

455
00:20:07,990 --> 00:20:06,350
and if somebody doesn't you know you

456
00:20:10,029 --> 00:20:08,000
back right away that means absolutely

457
00:20:11,680 --> 00:20:10,039
nothing about you it's not all about you

458
00:20:14,590 --> 00:20:11,690
it's not all about me Jen

459
00:20:17,860 --> 00:20:14,600
so uh huh yeah just don't read into

460
00:20:20,710 --> 00:20:17,870
emails and but dude do do a really good

461
00:20:22,870 --> 00:20:20,720
job you know and and proofread your

462
00:20:26,919 --> 00:20:22,880
emails and write really strong emails

463
00:20:29,830 --> 00:20:26,929

but don't ever take anything personal

464

00:20:31,930 --> 00:20:29,840

from an email basically but also don't

465

00:20:34,750 --> 00:20:31,940

ever write anything personal in an email

466

00:20:35,980 --> 00:20:34,760

because as we know now these days with

467

00:20:37,419 --> 00:20:35,990

all the lawyers out there and

468

00:20:39,159 --> 00:20:37,429

everybody's seeing everything and your

469

00:20:41,399 --> 00:20:39,169

university can read all your emails at

470

00:21:04,350 --> 00:20:41,409

any time so just don't ever say anything

471

00:21:11,799 --> 00:21:10,419

and keep your head up and take every bit

472

00:21:14,560 --> 00:21:11,809

of advice as though it was intended

473

00:21:16,899 --> 00:21:14,570

positively even if you think perhaps it

474

00:21:18,220 --> 00:21:16,909

wasn't just get rid of the negative

475

00:21:20,019 --> 00:21:18,230

thoughts and be like that's good advice

476

00:21:23,560 --> 00:21:20,029

I'll just I'll take that and I'll keep

477

00:21:25,060 --> 00:21:23,570

going you have everyone else the benefit

478

00:21:35,470 --> 00:21:25,070

of the bet doubt but especially give

479

00:21:37,090 --> 00:21:35,480

yourself it should all work out as long

480

00:21:40,450 --> 00:21:37,100

as you realize that there are multiple

481

00:21:43,710 --> 00:21:40,460

ways to get to point B over there and a

482

00:21:46,930 --> 00:21:43,720

couple of twists and turns of fine I

483

00:21:49,629 --> 00:21:46,940

would say if I was gonna sum it up work

484

00:21:52,450 --> 00:21:49,639

hard but take care of yourself meet

485

00:21:54,399 --> 00:21:52,460

people and do the best work that you can

486

00:21:56,590 --> 00:21:54,409

do and get your name and your science

487

00:21:59,740 --> 00:21:56,600

out there and the rest will take care of

488

00:22:01,960 --> 00:21:59,750

itself but also believe in yourself

489

00:22:03,879 --> 00:22:01,970

because if you think you're not

490

00:22:05,470 --> 00:22:03,889

qualified so you just don't apply you

491

00:22:08,049 --> 00:22:05,480

never know if you could have gotten that

492

00:22:11,169 --> 00:22:08,059

post doctor that fellowship or that job

493

00:22:13,149 --> 00:22:11,179

so give it a go a lot of other people

494

00:22:15,009 --> 00:22:13,159

that are very much less qualified than

495

00:22:17,500 --> 00:22:15,019

you will apply for that job so you

496

00:22:20,390 --> 00:22:17,510

should too

497

00:22:22,070 --> 00:22:20,400

trust me I read applications now a lot

498

00:22:23,630 --> 00:22:22,080

of people who are very much less

499

00:22:30,320 --> 00:22:23,640

qualified than you will apply for that

500

00:22:32,180 --> 00:22:30,330

job yeah some of the feedback that we

501
00:22:33,860 --> 00:22:32,190
got already was that we had only

502
00:22:35,779 --> 00:22:33,870
academics up here so if you have any

503
00:22:38,029 --> 00:22:35,789
industry questions I'm sure that they

504
00:22:47,120 --> 00:22:38,039
all know some things about industry and

505
00:22:50,149 --> 00:22:47,130
we'll take questions now thank you so

506
00:22:51,529 --> 00:22:50,159
speaking about transition to industry do

507
00:22:54,649 --> 00:22:51,539
one get the HD and extremely difficult

508
00:22:56,899 --> 00:22:54,659
and sometimes an oral field I mean that

509
00:22:58,430 --> 00:22:56,909
yeah you know I said yeah you have to do

510
00:23:00,980 --> 00:22:58,440
everything you can for success very

511
00:23:04,310 --> 00:23:00,990
students within academia and the truth

512
00:23:06,380 --> 00:23:04,320
is many of those graduates here will go

513
00:23:08,049 --> 00:23:06,390

into fields outside of academia I've not

514

00:23:10,399 --> 00:23:08,059

said necessarily in the industry

515

00:23:13,039 --> 00:23:10,409

something even beyond it so do you think

516

00:23:14,380 --> 00:23:13,049

we eyes are doing enough to prepare

517

00:23:21,590 --> 00:23:14,390

their students to that possibility

518

00:23:23,899 --> 00:23:21,600

transition outside of academia graduate

519

00:23:27,230 --> 00:23:23,909

school is not necessarily always about

520

00:23:29,120 --> 00:23:27,240

the specific details of the science that

521

00:23:30,980 --> 00:23:29,130

you're working on graduate school is

522

00:23:32,570 --> 00:23:30,990

about learning how to troubleshoot how

523

00:23:35,000 --> 00:23:32,580

to problem-solve and how to think

524

00:23:37,549 --> 00:23:35,010

critically and it doesn't matter what

525

00:23:40,190 --> 00:23:37,559

your PhD is in if you learn those skills

526

00:23:43,130 --> 00:23:40,200

you can transfer that to any job

527

00:23:45,140 --> 00:23:43,140

anywhere in the world I have a lot of

528

00:23:47,990 --> 00:23:45,150

friends who graduated with me that are

529

00:23:51,289 --> 00:23:48,000

not doing anything related to what they

530

00:23:53,750 --> 00:23:51,299

did in their PhD half of my job is not

531

00:23:55,340 --> 00:23:53,760

related to anything I did in my PhD half

532

00:23:57,680 --> 00:23:55,350

my jobs people management

533

00:23:59,419 --> 00:23:57,690

nothing ever trains you for that in

534

00:24:01,039 --> 00:23:59,429

graduate school and yet it's probably

535

00:24:03,560 --> 00:24:01,049

the most important skill that I could

536

00:24:04,940 --> 00:24:03,570

have for my job so if you know how to

537

00:24:06,049 --> 00:24:04,950

troubleshoot you know how to think

538

00:24:08,570 --> 00:24:06,059

critically and you know how to

539

00:24:10,669 --> 00:24:08,580

problem-solve you're gonna be fine no

540

00:24:12,740 --> 00:24:10,679

matter where you are they're looking for

541

00:24:14,600 --> 00:24:12,750

what comes with a degree not the

542

00:24:30,239 --> 00:24:14,610

specific training that you've had in

543

00:24:39,460 --> 00:24:37,960

so this is regarding TRL's so we see an

544

00:24:41,590 --> 00:24:39,470

astrobiology we have these large

545

00:24:43,619 --> 00:24:41,600

missions going out into the solar system

546

00:24:45,639 --> 00:24:43,629

and so forth but a lot of times they're

547

00:24:47,919 --> 00:24:45,649

vulnerable because the large ticket

548

00:24:50,590 --> 00:24:47,929

price to administrative wins especially

549

00:24:53,889 --> 00:24:50,600

instead of the sphere of NASA I feel

550

00:24:56,470 --> 00:24:53,899

strongly that we should diversify and

551
00:24:58,509 --> 00:24:56,480
try to be more innovative and more

552
00:24:59,680 --> 00:24:58,519
economical but I like to hear what

553
00:25:00,970 --> 00:24:59,690
suggestions you might have for getting

554
00:25:03,460 --> 00:25:00,980
through the valley of death the TRL

555
00:25:05,769 --> 00:25:03,470
valley of death okay so the

556
00:25:07,330 --> 00:25:05,779
reorganization of the Roses proposal

557
00:25:09,549 --> 00:25:07,340
structure was intended to eliminate the

558
00:25:11,379 --> 00:25:09,559
valley of death by going from the acid

559
00:25:14,080 --> 00:25:11,389
and a steps over to the Picasso and

560
00:25:17,649 --> 00:25:14,090
Matisse that's supposed to supposed to

561
00:25:18,970 --> 00:25:17,659
bridge that gap where Picasso is TRL one

562
00:25:22,720 --> 00:25:18,980
two three does everyone in here know

563
00:25:24,999 --> 00:25:22,730

what TRL is okay a couple of people TRL

564

00:25:27,399 --> 00:25:25,009

is technology readiness level it goes

565

00:25:29,259 --> 00:25:27,409

from one I can write it on a napkin up

566

00:25:32,440 --> 00:25:29,269

to 10 I've flown it multiple times and

567

00:25:36,190 --> 00:25:32,450

it has worked what used to happen is

568

00:25:38,080 --> 00:25:36,200

that it was good support for low TRL

569

00:25:40,210 --> 00:25:38,090

development and then there was good

570

00:25:43,419 --> 00:25:40,220

support for taking it from six up to

571

00:25:45,129 --> 00:25:43,429

flight but that that gap in here between

572

00:25:47,470 --> 00:25:45,139

I have demonstrated it in the laboratory

573

00:25:49,599 --> 00:25:47,480

and I can show that it would work in

574

00:25:52,629 --> 00:25:49,609

space that gap was not well covered and

575

00:25:54,369 --> 00:25:52,639

that is supposed to be covered now by

576

00:25:57,999 --> 00:25:54,379

the Matisse program which is the

577

00:26:01,810 --> 00:25:58,009

maturation of instruments for solar

578

00:26:04,389 --> 00:26:01,820

system exploration I think anyone in

579

00:26:06,369 --> 00:26:04,399

here have any experience with art

580

00:26:10,570 --> 00:26:06,379

history because Picasso versus Matisse

581

00:26:15,549 --> 00:26:10,580

sounds like somebody who had a degree in

582

00:26:19,330 --> 00:26:15,559

art history came up with that anyway so

583

00:26:21,070 --> 00:26:19,340

Picasso is now anything can enter at TRL

584

00:26:22,960 --> 00:26:21,080

one two three and it's supposed to exit

585

00:26:25,029 --> 00:26:22,970

with at least TRL elevation of one and

586

00:26:27,970 --> 00:26:25,039

then Matisse is anything can enter

587

00:26:29,769 --> 00:26:27,980

between I think three and six it's

588

00:26:31,810 --> 00:26:29,779

supposed to get everything up to six by

589

00:26:33,700 --> 00:26:31,820

the end whenever you go up for a big

590

00:26:37,330 --> 00:26:33,710

mission you have to come in at TRL six

591

00:26:38,710 --> 00:26:37,340

TRL six means that you have demonstrated

592

00:26:41,279 --> 00:26:38,720

that it can work in an analog

593

00:26:43,960 --> 00:26:41,289

environment which does not mean full

594

00:26:46,480 --> 00:26:43,970

full system ready to go to space

595

00:26:47,350 --> 00:26:46,490

but you know I've shaken it I've

596

00:26:49,270 --> 00:26:47,360

vibrated it

597

00:26:50,890 --> 00:26:49,280

I've vacuumed it all the way out I've

598

00:26:55,330 --> 00:26:50,900

run it upside down I've done all these

599

00:26:56,830 --> 00:26:55,340

other sorts of things that doesn't

600

00:26:58,540 --> 00:26:56,840

answer your question fully because we

601
00:27:01,330 --> 00:26:58,550
still have multi-generational mission

602
00:27:04,330 --> 00:27:01,340
with a political cycle that goes over at

603
00:27:05,590 --> 00:27:04,340
least every eight years if not four so I

604
00:27:09,010 --> 00:27:05,600
don't know how to answer that question

605
00:27:20,380 --> 00:27:09,020
fully but the new funding structure is

606
00:27:25,690 --> 00:27:22,930
either so as women how do you balance

607
00:27:27,910 --> 00:27:25,700
the difference between criticism that's

608
00:27:39,610 --> 00:27:27,920
constructive and that is somewhat

609
00:27:41,080 --> 00:27:39,620
discriminatory I'm sure Jen will have

610
00:27:44,830 --> 00:27:41,090
something that is much more constructive

611
00:27:48,190 --> 00:27:44,840
to say here in my own personal sanity

612
00:27:51,490 --> 00:27:48,200
I've tended to just assume everything is

613
00:27:53,590 --> 00:27:51,500

constructed just throw it all over there

614

00:27:57,430 --> 00:27:53,600

in that box in my brain and deal with it

615

00:27:58,600 --> 00:27:57,440

a different time that's great I think

616

00:28:01,450 --> 00:27:58,610

that's a very positive attitude

617

00:28:02,770 --> 00:28:01,460

everything is everything is constructive

618

00:28:04,300 --> 00:28:02,780

everything's gonna get rejected but

619

00:28:09,850 --> 00:28:04,310

everything is constructive I think

620

00:28:13,330 --> 00:28:09,860

that's a good approach I like that yeah

621

00:28:16,360 --> 00:28:13,340

I this so this pops into mine in terms

622

00:28:19,510 --> 00:28:16,370

of imposter syndrome but first of all I

623

00:28:21,220 --> 00:28:19,520

do want to say for the women well for

624

00:28:25,270 --> 00:28:21,230

all of you that I think imposter

625

00:28:27,850 --> 00:28:25,280

syndrome is pretty universal and of

626
00:28:28,810 --> 00:28:27,860
course there's ingrained things as women

627
00:28:32,680 --> 00:28:28,820
in society

628
00:28:34,840 --> 00:28:32,690
you know we definitely are expected to

629
00:28:36,970 --> 00:28:34,850
act one way but you know men are

630
00:28:40,540 --> 00:28:36,980
expected to act another way and then of

631
00:28:44,110 --> 00:28:40,550
course there's non-binary and and trans

632
00:28:47,650 --> 00:28:44,120
and so it's very complicated and we all

633
00:28:51,600 --> 00:28:47,660
have our own unique you know dilemmas

634
00:28:54,100 --> 00:28:51,610
but I guess what this makes me think of

635
00:28:55,720 --> 00:28:54,110
kind of a moment and I was thinking of

636
00:28:57,790 --> 00:28:55,730
this when when you were talking about

637
00:28:59,890 --> 00:28:57,800
you know networking and getting out

638
00:29:02,410 --> 00:28:59,900

there and cuz I kind of did a lot of

639

00:29:04,510 --> 00:29:02,420

that as a late PhD student and I

640

00:29:07,990 --> 00:29:04,520

actually got a little bit of like flack

641

00:29:10,920 --> 00:29:08,000

for it from some very few like it

642

00:29:14,950 --> 00:29:10,930

probably it overwhelmingly helped me but

643

00:29:18,250 --> 00:29:14,960

there were a couple senior men in the

644

00:29:21,870 --> 00:29:18,260

field who in a grumpy you know will not

645

00:29:25,300 --> 00:29:21,880

be named but who kind of said you know

646

00:29:28,180 --> 00:29:25,310

yep you know why are you offering to do

647

00:29:29,560 --> 00:29:28,190

these review papers and you know beyond

648

00:29:31,609 --> 00:29:29,570

this committee or this committee you

649

00:29:34,709 --> 00:29:31,619

know you need to focus on your research

650

00:29:36,599 --> 00:29:34,719

you know do that after tenure which is

651
00:29:38,190 --> 00:29:36,609
of course what you hear consul wait wait

652
00:29:42,419 --> 00:29:38,200
to do that till after tenure wait to do

653
00:29:45,869 --> 00:29:42,429
that so after tenure so and I do think

654
00:29:48,029 --> 00:29:45,879
that that in it that that comment was

655
00:29:51,509 --> 00:29:48,039
probably a little bit more directed to

656
00:29:53,999 --> 00:29:51,519
me as a as a woman than maybe than

657
00:30:01,459 --> 00:29:54,009
myself you know just from having seen

658
00:30:05,699 --> 00:30:01,469
how they've been treated you know but I

659
00:30:08,369 --> 00:30:05,709
think this is why it's so important to

660
00:30:09,539 --> 00:30:08,379
have lots of networks and to kind of

661
00:30:11,849 --> 00:30:09,549
surround yourself by this amazing

662
00:30:14,699 --> 00:30:11,859
community I think because it really is

663
00:30:16,409 --> 00:30:14,709

an amazing early career community and a

664

00:30:20,219 --> 00:30:16,419

lot more diverse obviously than the

665

00:30:21,930 --> 00:30:20,229

faculty and often so you guys all need

666

00:30:25,739 --> 00:30:21,940

to really support each other and you

667

00:30:27,889 --> 00:30:25,749

know help each other and and then you

668

00:30:30,930 --> 00:30:27,899

know once one of you gets hired you know

669

00:30:32,819 --> 00:30:30,940

Bob you know keep the other ones coming

670

00:30:36,209 --> 00:30:32,829

up we've done very well for white women

671

00:30:38,430 --> 00:30:36,219

as you can see now we need to get more

672

00:30:40,379 --> 00:30:38,440

diverse no acknowledge it we're all

673

00:30:44,609 --> 00:30:40,389

white women you're right so now we need

674

00:30:49,459 --> 00:30:44,619

to get more much more diverse diversity

675

00:30:53,129 --> 00:30:49,469

yep now the one with tenure gets to talk

676
00:30:54,239 --> 00:30:53,139
haha before tenure most of the time I

677
00:30:56,069 --> 00:30:54,249
just let it go

678
00:30:58,529 --> 00:30:56,079
I mean you pick your battles if it was

679
00:31:00,899 --> 00:30:58,539
really over-the-top ridiculous I would

680
00:31:04,139 --> 00:31:00,909
contact the editor or the program

681
00:31:06,329 --> 00:31:04,149
officer or someone um had a lot of

682
00:31:08,339 --> 00:31:06,339
behind-the-scenes discussions with

683
00:31:10,169 --> 00:31:08,349
friends at conferences about how to

684
00:31:10,919 --> 00:31:10,179
handle something somebody said those

685
00:31:13,589 --> 00:31:10,929
sorts of things

686
00:31:15,029 --> 00:31:13,599
on occasion you know you go in the

687
00:31:17,399 --> 00:31:15,039
bathroom and lock yourself in the stall

688
00:31:19,349 --> 00:31:17,409

and have a good cry and then go back out

689

00:31:22,079 --> 00:31:19,359

in the hallway and you're fine right

690

00:31:26,609 --> 00:31:22,089

that was one talk in particular when I

691

00:31:29,009 --> 00:31:26,619

was a grad student but once I got tenure

692

00:31:32,099 --> 00:31:29,019

so at Emory and chemistry I was the

693

00:31:37,589 --> 00:31:32,109

first woman to get tenure in state and

694

00:31:39,089 --> 00:31:37,599

so I and it not because of the need

695

00:31:40,680 --> 00:31:39,099

dysfunction in our department just

696

00:31:44,640 --> 00:31:40,690

because of the way things happened

697

00:31:49,350 --> 00:31:46,320

it's been a weird transition for me

698

00:31:51,840 --> 00:31:49,360

because I was also the year after I got

699

00:31:53,520 --> 00:31:51,850

tenure I had a son and I was the first

700

00:31:55,470 --> 00:31:53,530

woman in 22 years to take maternity

701
00:31:57,360 --> 00:31:55,480
leave in my department and they didn't

702
00:31:59,460 --> 00:31:57,370
even know which paperwork we needed to

703
00:32:05,010 --> 00:31:59,470
fill out it was really really

704
00:32:06,900 --> 00:32:05,020
complicated unnecessarily and so that

705
00:32:10,040 --> 00:32:06,910
raised a lot of things that I had never

706
00:32:12,660 --> 00:32:10,050
had to deal with in my career before and

707
00:32:15,330 --> 00:32:12,670
there were comments made that were

708
00:32:17,160 --> 00:32:15,340
innocent that needed to be addressed and

709
00:32:20,130 --> 00:32:17,170
I addressed them and on some occasions

710
00:32:22,850 --> 00:32:20,140
my colleagues address them on my behalf

711
00:32:27,360 --> 00:32:22,860
before I had a chance to say anything

712
00:32:29,430 --> 00:32:27,370
but now I feel like as a woman with the

713
00:32:32,760 --> 00:32:29,440

security of tenure and a male-dominated

714

00:32:35,130 --> 00:32:32,770

field in a male-dominated department it

715

00:32:37,680 --> 00:32:35,140

is my job to step up and say something

716

00:32:41,610 --> 00:32:37,690

because if I don't there isn't anybody

717

00:32:43,380 --> 00:32:41,620

else who will and so I am fighting

718

00:32:46,950 --> 00:32:43,390

battles now that I never would have

719

00:32:49,500 --> 00:32:46,960

fought before everywhere from my

720

00:32:53,220 --> 00:32:49,510

department to my university to funding

721

00:32:55,260 --> 00:32:53,230

agencies to journals all the way up I

722

00:32:57,870 --> 00:32:55,270

send emails I probably shouldn't send

723

00:32:59,820 --> 00:32:57,880

though I do live by the philosophy air

724

00:33:01,170 --> 00:32:59,830

cops once told me never write it in an

725

00:33:02,760 --> 00:33:01,180

email if you don't want it on the front

726

00:33:08,100 --> 00:33:02,770

of the New York Times and that is the

727

00:33:10,020 --> 00:33:08,110

best advice I've ever gotten but you

728

00:33:11,460 --> 00:33:10,030

know I send emails that I never would

729

00:33:13,530 --> 00:33:11,470

have sent before I got tenure

730

00:33:15,360 --> 00:33:13,540

I have phone conversations with program

731

00:33:17,790 --> 00:33:15,370

officers that I never would have had

732

00:33:19,830 --> 00:33:17,800

before I got tenure because I feel like

733

00:33:23,790 --> 00:33:19,840

I have to and I'm in a place where I can

734

00:33:26,160 --> 00:33:23,800

and I should and so use the level that

735

00:33:27,960 --> 00:33:26,170

you're at to help the people coming up

736

00:33:37,350 --> 00:33:27,970

behind you and it will continue to get

737

00:33:48,330 --> 00:33:37,360

better and if you need somebody to give

738

00:33:50,070 --> 00:33:48,340

you advice send it to one of us exactly

739

00:33:53,040 --> 00:33:50,080

use the level that's that's beautifully

740

00:33:55,350 --> 00:33:53,050

said and it's not that you can't write

741

00:33:56,970 --> 00:33:55,360

strongly-worded passionate things in an

742

00:33:59,260 --> 00:33:56,980

email you know that you really feel it's

743

00:34:01,299 --> 00:33:59,270

just never write anything

744

00:34:05,860 --> 00:34:01,309

I bet you don't want on the New York

745

00:34:07,419 --> 00:34:05,870

Times yeah and it's not just women that

746

00:34:08,889 --> 00:34:07,429

stand up for women or underrepresented

747

00:34:10,240 --> 00:34:08,899

minorities that stand up for

748

00:34:11,740 --> 00:34:10,250

underrepresented minorities it's

749

00:34:21,250 --> 00:34:11,750

everyone in this room standing up for

750

00:34:23,379 --> 00:34:21,260

everyone else in the community there are

751

00:34:25,180 --> 00:34:23,389

allies out there you just have to find

752

00:34:28,720 --> 00:34:25,190

them which is where the networking comes

753

00:34:33,220 --> 00:34:28,730

in some are obvious and some are not but

754

00:34:35,200 --> 00:34:33,230

they're there so I just wanted to go

755

00:34:37,750 --> 00:34:35,210

back to your points earlier about

756

00:34:39,430 --> 00:34:37,760

networking and such so in my current

757

00:34:41,800 --> 00:34:39,440

situation I'm a rising second year

758

00:34:43,389 --> 00:34:41,810

masters student and you know I'm trying

759

00:34:45,490 --> 00:34:43,399

to keep my options open for next

760

00:34:48,250 --> 00:34:45,500

semester while I'm applying to um

761

00:34:50,470 --> 00:34:48,260

different PhD programs and such and I

762

00:34:52,450 --> 00:34:50,480

found that I found a lot of universities

763

00:34:54,220 --> 00:34:52,460

in which they are programs that they

764

00:34:56,680 --> 00:34:54,230

support and offer are really interesting

765

00:34:59,050 --> 00:34:56,690

to me but I was looking for some advice

766

00:35:00,910 --> 00:34:59,060

on how to navigate talking to different

767

00:35:03,070 --> 00:35:00,920

professors at that University how do I

768

00:35:05,370 --> 00:35:03,080

figure out if I fit in with their group

769

00:35:08,200 --> 00:35:05,380

versus you know if my research is really

770

00:35:09,940 --> 00:35:08,210

applicable to what they're doing and how

771

00:35:11,770 --> 00:35:09,950

do I prepare myself for that sort of

772

00:35:15,280 --> 00:35:11,780

icebreaker conversation to sort of

773

00:35:16,510 --> 00:35:15,290

figure and navigate all that now I get

774

00:35:20,680 --> 00:35:16,520

to put on my director of Graduate

775

00:35:22,359 --> 00:35:20,690

Studies so the best thing you can do is

776

00:35:24,130 --> 00:35:22,369

look up everything you can about a

777

00:35:26,020 --> 00:35:24,140

particular professor you're interested

778

00:35:28,540 --> 00:35:26,030

in and send them an email a very

779

00:35:31,030 --> 00:35:28,550

carefully worded email that tells them

780

00:35:32,590 --> 00:35:31,040

who you are what your experience is what

781

00:35:33,760 --> 00:35:32,600

you're interested in and ask them if

782

00:35:36,820 --> 00:35:33,770

they're looking for students in their

783

00:35:39,160 --> 00:35:36,830

group and anybody who's actually serious

784

00:35:42,310 --> 00:35:39,170

about advising graduate students will

785

00:35:44,890 --> 00:35:42,320

respond to an email like that as quickly

786

00:35:46,240 --> 00:35:44,900

as they can and tell you honestly

787

00:35:48,849 --> 00:35:46,250

whether or not they're taking students

788

00:35:52,650 --> 00:35:48,859

the next year and if it's me I'll send

789

00:35:57,040 --> 00:35:52,660

you a link to our graduate application

790

00:35:59,230 --> 00:35:57,050

if you aren't sure if it's a good fit

791

00:36:00,849 --> 00:35:59,240

for you you can ask questions you can

792

00:36:02,410 --> 00:36:00,859

track down their students at conferences

793

00:36:04,359 --> 00:36:02,420

that's a really good way to find out

794

00:36:06,370 --> 00:36:04,369

information about a group every group

795

00:36:09,370 --> 00:36:06,380

has a personality and you need to figure

796

00:36:11,440 --> 00:36:09,380

out if it's a good match for you every

797

00:36:12,160 --> 00:36:11,450

program I've ever seen in science will

798

00:36:14,079 --> 00:36:12,170

bring you into

799

00:36:16,059 --> 00:36:14,089

visit before you have to make a decision

800

00:36:18,160 --> 00:36:16,069

about graduate school so go to the

801

00:36:20,799 --> 00:36:18,170

recruiting weekends ask a lot of

802

00:36:23,049 --> 00:36:20,809

questions get the students aside when

803

00:36:24,670 --> 00:36:23,059

the faculty member is not there and ask

804

00:36:27,039 --> 00:36:24,680

them what it's like to work for their

805

00:36:32,380 --> 00:36:27,049

advisor if they won't tell you there's a

806

00:36:35,559 --> 00:36:32,390

problem I actually shoved my students

807

00:36:37,180 --> 00:36:35,569

towards people and say I'm gonna go get

808

00:36:38,710 --> 00:36:37,190

something to eat and I'll be back in ten

809

00:36:40,870 --> 00:36:38,720

minutes because I want them to talk to

810

00:36:43,780 --> 00:36:40,880

my students when I'm not there not

811

00:36:45,520 --> 00:36:43,790

everybody will do that so yeah but you

812

00:36:47,500 --> 00:36:45,530

should definitely reach out so the

813

00:36:50,410 --> 00:36:47,510

summer before I applied to graduate

814

00:36:52,809 --> 00:36:50,420

school I emailed probably 30 different

815

00:36:54,520 --> 00:36:52,819

faculty members or more some of them

816

00:36:56,170 --> 00:36:54,530

wrote back some of them didn't some of

817

00:36:58,359 --> 00:36:56,180

them I was really interested in and so I

818

00:37:00,640 --> 00:36:58,369

tried multiple times one of those ended

819

00:37:02,460 --> 00:37:00,650

up being my graduate advisor anybody

820

00:37:08,049 --> 00:37:02,470

who's worked with him those it takes

821

00:37:09,460 --> 00:37:08,059

some time to get fed spawns and you know

822

00:37:11,260 --> 00:37:09,470

it just worked out I could tell from

823

00:37:14,470 --> 00:37:11,270

their responses who I was interested in

824

00:37:16,809 --> 00:37:14,480

and who I wasn't can I also ask at your

825

00:37:19,720 --> 00:37:16,819

point in applying and such did you

826

00:37:21,609 --> 00:37:19,730

already have research question and a

827

00:37:24,520 --> 00:37:21,619

project that you had thought upon don't

828

00:37:26,980 --> 00:37:24,530

your own most faculty have grant funding

829

00:37:29,020 --> 00:37:26,990

for specific projects and they will want

830

00:37:31,210 --> 00:37:29,030

to plug you into that unless you come

831

00:37:33,370 --> 00:37:31,220

with your own fellowship money okay

832

00:37:40,030 --> 00:37:33,380

gotcha so thank you that's really

833

00:37:42,130 --> 00:37:40,040

insightful that I'm always really

834

00:37:44,319 --> 00:37:42,140

impressed and also remember to always

835

00:37:47,530 --> 00:37:44,329

attach your CV to the first email just

836

00:37:50,020 --> 00:37:47,540

send it out doesn't hurt and I've always

837

00:37:52,240 --> 00:37:50,030

really impressed and now remember I'm a

838

00:37:55,690 --> 00:37:52,250

geologist and I don't know if it's

839

00:37:58,150 --> 00:37:55,700

different in chemistry but geology and

840

00:38:02,260 --> 00:37:58,160

microbiology I think - I think it's

841

00:38:04,920 --> 00:38:02,270

often really good for you to talk about

842

00:38:07,390 --> 00:38:04,930

how you could kind of see yourself

843

00:38:09,670 --> 00:38:07,400

fitting into a certain project or at

844

00:38:12,240 --> 00:38:09,680

least show that you've read their papers

845

00:38:16,420 --> 00:38:12,250

you know and you are actually really

846

00:38:20,020 --> 00:38:16,430

interested in you know their their work

847

00:38:21,789 --> 00:38:20,030

in some sort you know a way and it

848

00:38:23,410 --> 00:38:21,799

doesn't at all have to be what you it's

849

00:38:25,059 --> 00:38:23,420

not committing to a certain project it's

850

00:38:26,030 --> 00:38:25,069

just kind of showing how you might be

851

00:38:28,880 --> 00:38:26,040

able to see

852

00:38:30,110 --> 00:38:28,890

yourself fitting in that will really say

853

00:38:31,640 --> 00:38:30,120

especially if there's somebody you're

854

00:38:33,350 --> 00:38:31,650

really interested in that will really

855

00:38:35,720 --> 00:38:33,360

set you above the bar cuz most people

856

00:38:37,400 --> 00:38:35,730

don't don't do that it's usually form

857

00:38:39,860 --> 00:38:37,410

letters so if you don't if you write a

858

00:38:41,510 --> 00:38:39,870

really personalized same for the job

859

00:38:43,520 --> 00:38:41,520

market you want your cover letter as

860

00:38:50,600 --> 00:38:43,530

always to be personalized for that place

861

00:38:53,990 --> 00:38:50,610

not just form letters one other thing I

862

00:38:55,730 --> 00:38:54,000

forgot to mention is if you've been

863

00:38:57,350 --> 00:38:55,740

communicating with the specific faculty

864

00:38:59,090 --> 00:38:57,360

member and they're really interested in

865

00:39:00,980 --> 00:38:59,100

you as a student when they get to the

866

00:39:03,320 --> 00:39:00,990

point of doing admissions whoever's in

867

00:39:05,690 --> 00:39:03,330

charge of admissions will probably have

868

00:39:07,820 --> 00:39:05,700

that info and that will get your file

869

00:39:10,340 --> 00:39:07,830

reviewed in the first round of

870

00:39:12,110 --> 00:39:10,350

application review and so if they really

871

00:39:13,910 --> 00:39:12,120

want you they're gonna go find the

872

00:39:16,280 --> 00:39:13,920

admissions chair and they're gonna tell

873

00:39:21,140 --> 00:39:16,290

them I really want this student find

874

00:39:24,140 --> 00:39:21,150

their file and admit them right now so I

875

00:39:25,820 --> 00:39:24,150

get these emails all the time and so

876

00:39:27,440 --> 00:39:25,830

yeah if you have that personal contact

877

00:39:30,260 --> 00:39:27,450

and they're really impressed with you

878

00:39:31,460 --> 00:39:30,270

and you've had a multiple email exchange

879

00:39:35,720 --> 00:39:31,470

they're gonna be looking for your

880

00:39:37,190 --> 00:39:35,730

application when it comes in I haven't

881

00:39:40,070 --> 00:39:37,200

been a professor that long but I do have

882

00:39:42,290 --> 00:39:40,080

one quick story I had a student call me

883

00:39:44,690 --> 00:39:42,300

up he was a master's student and another

884

00:39:48,620 --> 00:39:44,700

University and he said I'd like your job

885

00:39:50,390 --> 00:39:48,630

how do I get it and so we started

886

00:39:52,160 --> 00:39:50,400

talking and I didn't I thought I was

887

00:39:56,540 --> 00:39:52,170

advising a student I didn't realize I

888

00:39:59,510 --> 00:39:56,550

was recruiting a student and so later he

889

00:40:00,740 --> 00:39:59,520

applied for Georgia Tech and yes he's a

890

00:40:03,440 --> 00:40:00,750

really great graduate student in my

891

00:40:10,190 --> 00:40:03,450

group now so that worked

892

00:40:12,140 --> 00:40:10,200

apparently do not email the person

893

00:40:13,910 --> 00:40:12,150

that's supposedly the nice one in a

894

00:40:15,830 --> 00:40:13,920

field and get all sorts of career advice

895

00:40:17,900 --> 00:40:15,840

and then when they offer you admission

896

00:40:20,150 --> 00:40:17,910

go somewhere else and refuse to come and

897

00:40:22,370 --> 00:40:20,160

visit because that happened to me once I

898

00:40:25,340 --> 00:40:22,380

spent months emailing with this student

899

00:40:26,330 --> 00:40:25,350

got them a fellowship everything and

900

00:40:30,110 --> 00:40:26,340

then they wouldn't even come for

901
00:40:32,150 --> 00:40:30,120
recruiting weekend so don't do that yeah

902
00:40:33,650 --> 00:40:32,160
at least go visit if you've taken the

903
00:40:36,620 --> 00:40:33,660
person's time to have an email

904
00:40:38,330 --> 00:40:36,630
conversation with them show up and ask

905
00:40:49,650 --> 00:40:38,340
questions

906
00:40:51,390 --> 00:40:49,660
yep and if you are interested in their

907
00:40:53,610 --> 00:40:51,400
group don't like totally ignore the

908
00:40:55,050 --> 00:40:53,620
group until the day before they have to

909
00:40:56,940 --> 00:40:55,060
sign off saying that they will accept

910
00:41:00,360 --> 00:40:56,950
you into their group because by then it

911
00:41:08,830 --> 00:41:00,370
might be too late general word of advice

912
00:41:13,760 --> 00:41:11,390
vanillite similar question but for

913
00:41:15,500 --> 00:41:13,770

postdocs especially for someone who is

914

00:41:18,860 --> 00:41:15,510

seeking postdoc in a little bit

915

00:41:21,020 --> 00:41:18,870

different area from their PhD and also

916

00:41:27,260 --> 00:41:21,030

what are the true duals and not to do

917

00:41:29,570 --> 00:41:27,270

when you're seeking her postdoc so I had

918

00:41:32,510 --> 00:41:29,580

a really great mentor who happened to be

919

00:41:34,490 --> 00:41:32,520

my husband's PhD advisor and when I was

920

00:41:36,440 --> 00:41:34,500

on the job market for a postdoc position

921

00:41:39,800 --> 00:41:36,450

I didn't know what to write in the

922

00:41:41,600 --> 00:41:39,810

letter and I went to my advisor and he

923

00:41:43,100 --> 00:41:41,610

gave me good advice and then I went to

924

00:41:45,730 --> 00:41:43,110

this other adviser and he gave me

925

00:41:49,310 --> 00:41:45,740

fantastic advice and his advice was

926

00:41:51,530 --> 00:41:49,320

always offer to apply for fellowship

927

00:41:53,750 --> 00:41:51,540

money it doesn't matter if you get it

928

00:41:56,960 --> 00:41:53,760

but the fact that you're willing to try

929

00:41:58,610 --> 00:41:56,970

for him was the cutoff between somebody

930

00:42:01,730 --> 00:41:58,620

he would seriously consider in someone

931

00:42:04,400 --> 00:42:01,740

he wouldn't this is a really big name in

932

00:42:06,620 --> 00:42:04,410

chemistry so in groups where they get

933

00:42:08,780 --> 00:42:06,630

inundated with postdoc applications that

934

00:42:09,890 --> 00:42:08,790

may very well be the deciding factor as

935

00:42:14,210 --> 00:42:09,900

to whether or not your file is

936

00:42:17,750 --> 00:42:14,220

considered or not but I would say you

937

00:42:20,090 --> 00:42:17,760

know if you can tell the person in a

938

00:42:22,250 --> 00:42:20,100

short email why you would be a very good

939

00:42:24,560 --> 00:42:22,260

fit for their group and what new skills

940

00:42:27,200 --> 00:42:24,570

you would learn from being in their

941

00:42:30,370 --> 00:42:27,210

group that will go a long way to getting

942

00:42:34,040 --> 00:42:30,380

their attention but we get spammed

943

00:42:36,320 --> 00:42:34,050

almost daily by mass emails from people

944

00:42:38,030 --> 00:42:36,330

who are looking for a postdoc position

945

00:42:40,490 --> 00:42:38,040

and they just like go through an email

946

00:42:42,620 --> 00:42:40,500

everybody in a department and I get all

947

00:42:44,570 --> 00:42:42,630

these emails that start with dear sir I

948

00:42:46,880 --> 00:42:44,580

would like a postdoc position in your

949

00:42:49,250 --> 00:42:46,890

lab I have extensive experience in

950

00:42:52,820 --> 00:42:49,260

medicinal chemistry and I'm like I don't

951
00:42:55,100 --> 00:42:52,830
understand why I this is not what I do

952
00:42:56,750 --> 00:42:55,110
when I'm in a bad mood on occasion all

953
00:42:58,070 --> 00:42:56,760
right back and be like why did you email

954
00:43:03,860 --> 00:42:58,080
me this is not what I do

955
00:43:05,420 --> 00:43:03,870
and I am NOT sir but so make sure that

956
00:43:07,070 --> 00:43:05,430
you get the name right make sure that

957
00:43:08,720 --> 00:43:07,080
you know what they actually do and that

958
00:43:11,120 --> 00:43:08,730
you're a good fit for their lab and

959
00:43:13,400 --> 00:43:11,130
you'll get past that initial delete

960
00:43:17,809 --> 00:43:13,410
delete delete that many of us do because

961
00:43:25,939 --> 00:43:21,890
I might suggest also query your network

962
00:43:31,219 --> 00:43:25,949
because I think me as a new professor

963
00:43:34,189 --> 00:43:31,229

particularly I'm not necessarily feeling

964

00:43:36,529 --> 00:43:34,199

like high-risk situations are a good a

965

00:43:38,509 --> 00:43:36,539

good move for me but if I have a

966

00:43:39,890 --> 00:43:38,519

colleague that I really trust say my

967

00:43:42,729 --> 00:43:39,900

student is graduating they're looking

968

00:43:45,319 --> 00:43:42,739

for a postdoc that's a lot more of the

969

00:43:54,739 --> 00:43:45,329

that seems more nervous and I think

970

00:43:55,819 --> 00:43:54,749

that's going to be hi thank you so much

971

00:43:58,819 --> 00:43:55,829

for doing this by the way this is a very

972

00:44:00,890 --> 00:43:58,829

very insightful I want to jump on this

973

00:44:03,589 --> 00:44:00,900

train also of the networking and also

974

00:44:05,989 --> 00:44:03,599

keeping your options open what would you

975

00:44:07,969 --> 00:44:05,999

advise PhD students you know to keep

976

00:44:10,599 --> 00:44:07,979

their options open on the network well

977

00:44:13,670 --> 00:44:10,609

you know as it was mentioned earlier or

978

00:44:16,069 --> 00:44:13,680

it's a small community for astrobiology

979

00:44:23,660 --> 00:44:16,079

right like how do we I guess yeah keep

980

00:44:27,739 --> 00:44:23,670

our options open networking I think just

981

00:44:29,989 --> 00:44:27,749

I mean it goes a long way just paying

982

00:44:31,759 --> 00:44:29,999

attention in the moment I know this

983

00:44:34,219 --> 00:44:31,769

sounds really hokey and hippie or

984

00:44:35,870 --> 00:44:34,229

whatever but you know I a lot of times

985

00:44:38,930 --> 00:44:35,880

I'll just say all the things I did wrong

986

00:44:41,569 --> 00:44:38,940

and continue to do wrong but I'm like on

987

00:44:43,219 --> 00:44:41,579

my phone or I'm like bitter and not

988

00:44:46,189 --> 00:44:43,229

paying attention and like the people

989

00:44:47,799 --> 00:44:46,199

that actually really and some people my

990

00:44:49,880 --> 00:44:47,809

group are really good about this

991

00:44:53,199 --> 00:44:49,890

actually I think everybody is better

992

00:44:56,209 --> 00:44:53,209

than me like really active listening and

993

00:44:58,160 --> 00:44:56,219

you know and practicing kind of

994

00:45:00,410 --> 00:44:58,170

assimilating information because there's

995

00:45:04,249 --> 00:45:00,420

just so much that's useful all around

996

00:45:06,559 --> 00:45:04,259

you all the time and also it's just

997

00:45:08,660 --> 00:45:06,569

really impressive when someone's like we

998

00:45:10,219 --> 00:45:08,670

can you know obviously we can like see

999

00:45:13,370 --> 00:45:10,229

you guys in the audience and the person

1000

00:45:16,449 --> 00:45:13,380

that's like not the whole time but you

1001
00:45:19,099 --> 00:45:16,459
know that's like really interested and

1002
00:45:22,279 --> 00:45:19,109
following along that actually goes a

1003
00:45:23,599 --> 00:45:22,289
long way and that then you know you're

1004
00:45:25,430 --> 00:45:23,609
just using all the information that's

1005
00:45:27,949 --> 00:45:25,440
coming at you it's not any extra time

1006
00:45:29,719 --> 00:45:27,959
beyond what you're already doing

1007
00:45:30,410 --> 00:45:29,729
and then I don't know a lot of its just

1008
00:45:33,109 --> 00:45:30,420
sarin

1009
00:45:35,240 --> 00:45:33,119
I think that you know you're gonna bump

1010
00:45:36,920 --> 00:45:35,250
into somebody and you know there's

1011
00:45:38,990 --> 00:45:36,930
probably you know a hundred different

1012
00:45:40,579 --> 00:45:39,000
people that you could have a potentially

1013
00:45:43,130 --> 00:45:40,589

a great postdoc with right there's not

1014

00:45:45,440 --> 00:45:43,140

just one person it's like you know like

1015

00:45:49,910 --> 00:45:45,450

a spouse or whatever well I guess we can

1016

00:45:51,920 --> 00:45:49,920

do there's different one person in the

1017

00:45:54,620 --> 00:45:51,930

universe for all for each of you but I

1018

00:45:56,599 --> 00:45:54,630

think similar with postdoc advisors or

1019

00:46:00,740 --> 00:45:56,609

PhD advisors there's probably multiple

1020

00:46:03,500 --> 00:46:00,750

people in the universe world exoplanets

1021

00:46:05,240 --> 00:46:03,510

that would work for your adviser for it

1022

00:46:07,099 --> 00:46:05,250

to be your advisor right and so you

1023

00:46:08,539 --> 00:46:07,109

don't have to go find the one you just

1024

00:46:10,430 --> 00:46:08,549

have to find someone who's gonna be a

1025

00:46:13,069 --> 00:46:10,440

good good one for you so don't stress

1026

00:46:17,210 --> 00:46:13,079

too hard about finding the right match

1027

00:46:18,980 --> 00:46:17,220

but also you know you know if you hear

1028

00:46:21,200 --> 00:46:18,990

something really interesting in a talk

1029

00:46:22,520 --> 00:46:21,210

always go up afterwards and talk to that

1030

00:46:25,460 --> 00:46:22,530

person and you'd be amazed at how many

1031

00:46:28,430 --> 00:46:25,470

opportunities open up by just that after

1032

00:46:29,839 --> 00:46:28,440

you know that that interchange after a

1033

00:46:31,160 --> 00:46:29,849

talk and you don't have to ever follow

1034

00:46:32,780 --> 00:46:31,170

up with them or do anything but

1035

00:46:50,030 --> 00:46:32,790

sometimes amazing things are gonna

1036

00:46:52,849 --> 00:46:50,040

happen and it's two minutes right okay

1037

00:46:54,920 --> 00:46:52,859

so there's no unique match but selecting

1038

00:46:56,089 --> 00:46:54,930

your PhD or postdoc advisor is kind of

1039

00:46:57,349 --> 00:46:56,099

like having a kid with someone they're

1040

00:47:11,030 --> 00:46:57,359

gonna be in your life for the rest of

1041

00:47:11,040 --> 00:47:37,780

[Laughter]

1042

00:47:42,320 --> 00:47:40,310

Thanks so one of the things that's sort

1043

00:47:44,300 --> 00:47:42,330

of daunting for me when I envision you

1044

00:47:46,460 --> 00:47:44,310

know the possibility of obtaining and

1045

00:47:49,010 --> 00:47:46,470

performing well for a tenure-track

1046

00:47:51,800 --> 00:47:49,020

faculty position is that big leap

1047

00:47:53,150 --> 00:47:51,810

between you know being having a lot of

1048

00:47:56,240 --> 00:47:53,160

experience and performing well as a

1049

00:47:58,760 --> 00:47:56,250

researcher onto large-scale project

1050

00:48:00,710 --> 00:47:58,770

management people management getting a

1051
00:48:03,770 --> 00:48:00,720
network of collaborators do you have any

1052
00:48:06,050 --> 00:48:03,780
advice for building up that experience

1053
00:48:08,330 --> 00:48:06,060
in terms of you know potentially sort of

1054
00:48:10,700 --> 00:48:08,340
being thrown into that situation for the

1055
00:48:15,320 --> 00:48:10,710
first time in what steps you guys have

1056
00:48:17,840 --> 00:48:15,330
taken to get that sort of experience if

1057
00:48:20,570 --> 00:48:17,850
you're a grad student mentor undergrads

1058
00:48:23,000 --> 00:48:20,580
if you're a postdoc mentor grad students

1059
00:48:24,650 --> 00:48:23,010
and undergrads it's the best experience

1060
00:48:26,600 --> 00:48:24,660
that you can get and if you have a

1061
00:48:28,040 --> 00:48:26,610
chance to work on an experiment or a

1062
00:48:30,920 --> 00:48:28,050
project that's starting from the ground

1063
00:48:33,320 --> 00:48:30,930

up that also really prepares you well

1064

00:48:34,790 --> 00:48:33,330

for starting a research group the

1065

00:48:39,140 --> 00:48:34,800

challenge with that is you still need

1066

00:48:41,990 --> 00:48:39,150

papers so you need to have evidence for

1067

00:48:44,960 --> 00:48:42,000

your work I joined a brand new lab as a

1068

00:48:46,910 --> 00:48:44,970

postdoc and I would not say that the

1069

00:48:49,700 --> 00:48:46,920

papers that I got out were high-impact

1070

00:48:51,740 --> 00:48:49,710

but I got a lot of papers out in those

1071

00:48:53,900 --> 00:48:51,750

three years despite the fact that it was

1072

00:48:56,600 --> 00:48:53,910

a brand new group and my postdoc advisor

1073

00:48:59,090 --> 00:48:56,610

could say she effectively built my lab

1074

00:49:01,520 --> 00:48:59,100

and so they knew when I walked into my

1075

00:49:03,260 --> 00:49:01,530

position that I had the ability to at

1076
00:49:06,020 --> 00:49:03,270
least get a lab up and running and get

1077
00:49:08,000 --> 00:49:06,030
an experiment up and running but the

1078
00:49:09,380 --> 00:49:08,010
people skills part I learned that along

1079
00:49:10,910 --> 00:49:09,390
the way and there are two people in the

1080
00:49:13,360 --> 00:49:10,920
audience that can attest to the fact

1081
00:49:15,590 --> 00:49:13,370
that I didn't get it right all the time

1082
00:49:18,740 --> 00:49:15,600
because they started with me the very

1083
00:49:22,070 --> 00:49:18,750
first year there's a lot of growing both

1084
00:49:23,570 --> 00:49:22,080
with students and with faculty and one

1085
00:49:26,480 --> 00:49:23,580
of my colleagues told me very early on

1086
00:49:29,210 --> 00:49:26,490
students are the most expensive pieces

1087
00:49:31,130 --> 00:49:29,220
of equipment that you have all of them

1088
00:49:33,430 --> 00:49:31,140

work differently and none of them come

1089

00:49:36,970 --> 00:49:33,440

with an instrument manual and it's

1090

00:49:39,110 --> 00:49:36,980

absolutely 100% true every student is

1091

00:49:42,440 --> 00:49:39,120

different and you have to find the right

1092

00:49:45,260 --> 00:49:42,450

interaction approach with that for

1093

00:49:48,890 --> 00:49:45,270

advising and the right motivators and

1094

00:49:50,510 --> 00:49:48,900

the right things to do as an advisor to

1095

00:49:53,630 --> 00:49:50,520

help that person become

1096

00:49:56,090 --> 00:49:53,640

efficient as a scientist and that's most

1097

00:49:59,180 --> 00:49:56,100

of my job at this point that writing

1098

00:50:01,280 --> 00:49:59,190

grants and papers but yeah you pick up

1099

00:50:02,390 --> 00:50:01,290

that experience along the way but you

1100

00:50:04,670 --> 00:50:02,400

have to kind of seek out those

1101

00:50:06,260 --> 00:50:04,680

opportunities it's very tempting to say

1102

00:50:08,600 --> 00:50:06,270

no I'm gonna hide in my corner and do my

1103

00:50:09,770 --> 00:50:08,610

science and ignore everybody else but if

1104

00:50:15,040 --> 00:50:09,780

you do that you don't really come out

1105

00:50:20,750 --> 00:50:17,060

remember that science is done by

1106

00:50:22,220 --> 00:50:20,760

scientists also you mentioned proposals

1107

00:50:24,590 --> 00:50:22,230

at the very end but you can write

1108

00:50:32,650 --> 00:50:24,600

proposals before before then write

1109

00:50:36,940 --> 00:50:32,660

proposals at every step for those those

1110

00:50:40,400 --> 00:50:36,950

you know like is there still the the

1111

00:50:42,530 --> 00:50:40,410

Lewis and Clark travel fellowship like

1112

00:50:44,510 --> 00:50:42,540

go for those level right that actually

1113

00:50:46,190 --> 00:50:44,520

goes a long way when you're on the job

1114

00:50:50,750 --> 00:50:46,200

market to have like a bunch of small

1115

00:50:52,820 --> 00:50:50,760

ones and I think just know also that

1116

00:50:55,070 --> 00:50:52,830

we're not trained in business management

1117

00:50:56,900 --> 00:50:55,080

and we're not trained in psychology it

1118

00:50:59,510 --> 00:50:56,910

was not most of us that would be really

1119

00:51:00,320 --> 00:50:59,520

nice if we could be that would help a

1120

00:51:03,410 --> 00:51:00,330

lot I think

1121

00:51:05,960 --> 00:51:03,420

but right now the way it is we're not

1122

00:51:08,000 --> 00:51:05,970

and so you're gonna pick it up along the

1123

00:51:10,250 --> 00:51:08,010

way and you're just trust yourself fit

1124

00:51:12,470 --> 00:51:10,260

you know you're you're gonna be fine

1125

00:51:14,600 --> 00:51:12,480

like none of us had any additional

1126
00:51:16,850 --> 00:51:14,610
skills than what you had and and you'll

1127
00:51:18,950 --> 00:51:16,860
be able to you'll be fine it's kind of

1128
00:51:21,200 --> 00:51:18,960
like exposure therapy at a certain point

1129
00:51:25,190 --> 00:51:21,210
you just kind of have to like jump in

1130
00:51:27,230 --> 00:51:25,200
and realize you can do it and you know

1131
00:51:29,270 --> 00:51:27,240
that gets a lot at least for me that

1132
00:51:31,310 --> 00:51:29,280
helped me over a lot over the posture

1133
00:51:33,170 --> 00:51:31,320
syndrome to was just like suddenly oh my

1134
00:51:34,790 --> 00:51:33,180
god I'm doing it I guess I'm not dead

1135
00:51:37,370 --> 00:51:34,800
yeah I haven't blown up the building

1136
00:51:43,430 --> 00:51:37,380
like okay and now it's five years later

1137
00:51:45,920 --> 00:51:43,440
you know yeah yeah but do make sure to

1138
00:51:48,740 --> 00:51:45,930

really ask your network about you know

1139

00:51:50,870 --> 00:51:48,750

who you who you work with

1140

00:51:56,930 --> 00:51:50,880

now I figured out really good a

1141

00:52:01,130 --> 00:51:56,940

wonderful you know people and but there

1142

00:52:03,770 --> 00:52:01,140

were some interesting experiences at the

1143

00:52:07,430 --> 00:52:03,780

beginning with collaborators

1144

00:52:09,860 --> 00:52:07,440

and so be sure you that your

1145

00:52:12,020 --> 00:52:09,870

collaborators carefully and ask your

1146

00:52:13,310 --> 00:52:12,030

networks about them and so that's all

1147

00:52:14,840 --> 00:52:13,320

the more reason that it's really

1148

00:52:16,670 --> 00:52:14,850

important to have a really big network

1149

00:52:19,010 --> 00:52:16,680

of people you trust like this community

1150

00:52:20,480 --> 00:52:19,020

you know and then you guys each trust

1151
00:52:23,000 --> 00:52:20,490
people and so you can tell people who

1152
00:52:25,490 --> 00:52:23,010
you trust and so spread the word on

1153
00:52:28,100 --> 00:52:25,500
who's trustworthy and who's an ally and

1154
00:52:30,860 --> 00:52:28,110
and then sadly there are some non allies

1155
00:52:36,200 --> 00:52:30,870
to tell spread the word about them too

1156
00:52:37,970 --> 00:52:36,210
you know okay so I think it would be

1157
00:52:42,080 --> 00:52:37,980
good to end like a couple minutes early

1158
00:52:44,000 --> 00:52:42,090
so if you guys can meet up at like 3:30

1159
00:52:45,920 --> 00:52:44,010
five out in the stairs over here we'll

1160
00:52:47,270 --> 00:52:45,930
take the picture go fast and then the

1161
00:52:49,700 --> 00:52:47,280
next thing up I believe is the poster

1162
00:52:52,820 --> 00:52:49,710
session in mozi for which there will be

1163
00:52:56,630 --> 00:52:52,830

a beer and cider so that's extra reason

1164

00:52:58,280 --> 00:52:56,640

to go look so like seven minutes and

1165

00:53:01,760 --> 00:52:58,290

then meet in the stairwell please does

1166

00:53:02,260 --> 00:53:01,770

that work oh yes and thank you guys so