



NASA TOWN HALL  
**DR. MARY VOYTEK**  
MAY 16 · 6:30PM EDT



1  
00:00:03,280 --> 00:00:06,950  
so good evening everyone

2  
00:00:12,150 --> 00:00:09,030  
those of you who don't know me or have

3  
00:00:13,430 --> 00:00:12,160  
forgotten who i am i'm michael new i'm

4  
00:00:15,430 --> 00:00:13,440  
currently the deputy associate

5  
00:00:17,830 --> 00:00:15,440  
administrator for research

6  
00:00:19,590 --> 00:00:17,840  
in science mission directorate

7  
00:00:21,269 --> 00:00:19,600  
but before i was that

8  
00:00:24,070 --> 00:00:21,279  
i was the astrobiology discipline

9  
00:00:25,910 --> 00:00:24,080  
scientist for 15 years

10  
00:00:27,910 --> 00:00:25,920  
i got to say it's great to be back

11  
00:00:29,429 --> 00:00:27,920  
amongst astrobiologists it's really

12  
00:00:31,029 --> 00:00:29,439  
great to see so many

13  
00:00:33,350 --> 00:00:31,039

familiar faces

14

00:00:36,069 --> 00:00:33,360

it's even more great to see so many new

15

00:00:38,630 --> 00:00:36,079

faces and i think that's

16

00:00:41,110 --> 00:00:38,640

always been something very

17

00:00:43,430 --> 00:00:41,120

rewarding to me about astrobiology is

18

00:00:44,709 --> 00:00:43,440

the constant flow of new people new

19

00:00:48,790 --> 00:00:44,719

ideas

20

00:00:54,229 --> 00:00:51,510

it's been two years more actually since

21

00:00:56,470 --> 00:00:54,239

we first last met outside of seattle in

22

00:01:00,150 --> 00:00:56,480

2019

23

00:01:03,430 --> 00:01:00,160

it's been quite a rough couple of years

24

00:01:05,109 --> 00:01:03,440

personally for some people

25

00:01:07,910 --> 00:01:05,119

as a community

26

00:01:13,270 --> 00:01:09,109

a nation

27

00:01:17,030 --> 00:01:15,590

in addition to the new faces i'm meeting

28

00:01:20,950 --> 00:01:17,040

uh there are some

29

00:01:23,190 --> 00:01:20,960

familiar faces that i will not see

30

00:01:25,590 --> 00:01:23,200

and i believe that they will live in our

31

00:01:28,149 --> 00:01:25,600

blessed memory and provide comfort in

32

00:01:32,310 --> 00:01:30,550

it's quite a future though

33

00:01:34,550 --> 00:01:32,320

lori glaze the division director from

34

00:01:36,390 --> 00:01:34,560

planetary science division will be

35

00:01:38,710 --> 00:01:36,400

telling you all about the really cool

36

00:01:41,990 --> 00:01:38,720

stuff coming up

37

00:01:47,190 --> 00:01:42,000

you know sample returns

38

00:01:52,230 --> 00:01:50,069

um mary wojtek the astrobiology senior

39

00:01:55,109 --> 00:01:52,240

scientist and lindsey hayes

40

00:01:56,950 --> 00:01:55,119

her deputy um send their regrets that

41

00:02:00,789 --> 00:01:56,960

they can't be here in person

42

00:02:04,630 --> 00:02:02,789

i think you guys got the worst part of

43

00:02:05,749 --> 00:02:04,640

the deal there but okay fine we can move

44

00:02:08,630 --> 00:02:05,759

on

45

00:02:10,790 --> 00:02:08,640

um and mary asked me since i'm doing

46

00:02:12,869 --> 00:02:10,800

this to give you guys a little brief

47

00:02:15,270 --> 00:02:12,879

overview of a couple of the things that

48

00:02:17,430 --> 00:02:15,280

smd the science mission directorate writ

49

00:02:19,750 --> 00:02:17,440

large is doing

50

00:02:21,910 --> 00:02:19,760

before we get on to the more planetary

51  
00:02:24,070 --> 00:02:21,920  
science division and then astrobiology

52  
00:02:27,670 --> 00:02:24,080  
program specific stuff so i'll stop

53  
00:02:29,750 --> 00:02:28,470  
so

54  
00:02:32,470 --> 00:02:29,760  
one of the things that we've been very

55  
00:02:33,509 --> 00:02:32,480  
interested in promoting in smd is high

56  
00:02:35,350 --> 00:02:33,519  
impact

57  
00:02:37,830 --> 00:02:35,360  
high risk research

58  
00:02:40,070 --> 00:02:37,840  
it was a priority in 2018 it is still a

59  
00:02:41,670 --> 00:02:40,080  
priority for us right now

60  
00:02:44,070 --> 00:02:41,680  
now it's important to notice when i say

61  
00:02:44,949 --> 00:02:44,080  
high risk i do not mean high technical

62  
00:02:50,309 --> 00:02:44,959  
risk

63  
00:02:52,150 --> 00:02:50,319

my boss likes to sometimes call this

64

00:02:54,070 --> 00:02:52,160

reputational risk

65

00:02:55,990 --> 00:02:54,080

you're going to propose something that

66

00:02:58,550 --> 00:02:56,000

the panel may look at and go

67

00:03:01,110 --> 00:02:58,560

they said what

68

00:03:02,630 --> 00:03:01,120

so we've done a recent reanalysis of

69

00:03:04,550 --> 00:03:02,640

some data

70

00:03:06,470 --> 00:03:04,560

and we compared it to the debt analysis

71

00:03:08,949 --> 00:03:06,480

we did back in 2018.

72

00:03:10,149 --> 00:03:08,959

what we found is that it is absolutely

73

00:03:12,630 --> 00:03:10,159

still true

74

00:03:14,630 --> 00:03:12,640

that high-risk high-impact proposals

75

00:03:17,110 --> 00:03:14,640

form a very small fraction of the

76

00:03:19,830 --> 00:03:17,120

proposals actually submitted

77

00:03:21,030 --> 00:03:19,840

to the science mission directorate

78

00:03:23,589 --> 00:03:21,040

but

79

00:03:25,110 --> 00:03:23,599

those proposals are selected at a much

80

00:03:28,229 --> 00:03:25,120

much higher rate

81

00:03:31,190 --> 00:03:28,239

than all the other proposals we get

82

00:03:33,509 --> 00:03:31,200

so if you guys have a high intellectual

83

00:03:35,910 --> 00:03:33,519

risk high impact idea

84

00:03:38,869 --> 00:03:35,920

for a proposal and i'm sure everybody at

85

00:03:41,509 --> 00:03:38,879

absycon has at least one

86

00:03:43,430 --> 00:03:41,519

please consider sending it to nasa

87

00:03:45,750 --> 00:03:43,440

the odds of getting selected

88

00:03:47,910 --> 00:03:45,760

are higher than just sending in a

89

00:03:53,110 --> 00:03:47,920

routine

90

00:03:58,229 --> 00:03:55,589

deia diversity equity

91

00:04:00,949 --> 00:03:58,239

inclusion and accessibility is also

92

00:04:03,110 --> 00:04:00,959

another thing that we and smd have been

93

00:04:05,030 --> 00:04:03,120

focusing on for at least the last four

94

00:04:07,750 --> 00:04:05,040

or five years

95

00:04:10,309 --> 00:04:07,760

we've recognized that there's a real

96

00:04:12,229 --> 00:04:10,319

lack of diversity along all the axes of

97

00:04:15,270 --> 00:04:12,239

diversity

98

00:04:17,749 --> 00:04:15,280

in terms of both funded researchers and

99

00:04:19,909 --> 00:04:17,759

funded institutions

100

00:04:21,909 --> 00:04:19,919

we are in the process of introducing a

101  
00:04:24,230 --> 00:04:21,919  
whole portfolio of programs and

102  
00:04:26,469 --> 00:04:24,240  
approaches try to remedy this

103  
00:04:28,390 --> 00:04:26,479  
these include an expansion of our dual

104  
00:04:31,030 --> 00:04:28,400  
anonymous peer review program

105  
00:04:33,350 --> 00:04:31,040  
those of you may have read this dual

106  
00:04:36,150 --> 00:04:33,360  
anonymous peer review is a situation in

107  
00:04:38,070 --> 00:04:36,160  
which we do not let peer reviewers know

108  
00:04:40,469 --> 00:04:38,080  
who is proposing and what their

109  
00:04:42,150 --> 00:04:40,479  
institutions are

110  
00:04:45,350 --> 00:04:42,160  
until after they have decided on the

111  
00:04:47,909 --> 00:04:45,360  
scientific merit of a proposal

112  
00:04:51,030 --> 00:04:47,919  
this has been shown in other contexts to

113  
00:04:52,230 --> 00:04:51,040

mitigate a number of biases

114

00:04:54,950 --> 00:04:52,240

we were also

115

00:04:56,790 --> 00:04:54,960

developed and employing codes of conduct

116

00:04:59,510 --> 00:04:56,800

for our peer reviewers

117

00:05:01,670 --> 00:04:59,520

for our program officers

118

00:05:03,510 --> 00:05:01,680

now for nasa-sponsored conferences like

119

00:05:06,230 --> 00:05:03,520

this one

120

00:05:09,189 --> 00:05:06,240

and we will soon be codifying

121

00:05:10,710 --> 00:05:09,199

a standardized code of conduct for both

122

00:05:14,070 --> 00:05:10,720

mission teams

123

00:05:18,070 --> 00:05:16,790

in addition to the codes of conduct

124

00:05:21,189 --> 00:05:18,080

we will be

125

00:05:26,070 --> 00:05:21,199

coming up with reasonable reporting

126  
00:05:26,080 --> 00:05:30,070  
implementation approaches

127  
00:05:34,469 --> 00:05:32,310  
we also are coming up with ways to try

128  
00:05:36,310 --> 00:05:34,479  
to increase our outreach to minority

129  
00:05:39,270 --> 00:05:36,320  
serving institutions and primarily

130  
00:05:40,950 --> 00:05:39,280  
undergraduate institutions

131  
00:05:43,270 --> 00:05:40,960  
what we found is that a rather small

132  
00:05:44,950 --> 00:05:43,280  
percentage of proposals we get come from

133  
00:05:47,110 --> 00:05:44,960  
these types of institutions however they

134  
00:05:48,469 --> 00:05:47,120  
are selected at about the same rate

135  
00:05:51,430 --> 00:05:48,479  
you'd expect

136  
00:05:53,189 --> 00:05:51,440  
so the big barrier is not in

137  
00:05:54,390 --> 00:05:53,199  
evaluating and selecting these types of

138  
00:05:57,670 --> 00:05:54,400

proposals

139

00:05:59,430 --> 00:05:57,680

it is getting them in the first place

140

00:06:01,990 --> 00:05:59,440

part of that is we are creating

141

00:06:06,390 --> 00:06:02,000

something called the bridge program

142

00:06:08,710 --> 00:06:06,400

this will be a program to link minority

143

00:06:10,550 --> 00:06:08,720

serving and primarily undergraduate

144

00:06:11,350 --> 00:06:10,560

serving institutions

145

00:06:13,830 --> 00:06:11,360

to

146

00:06:16,629 --> 00:06:13,840

both big

147

00:06:18,629 --> 00:06:16,639

big research universities and

148

00:06:21,430 --> 00:06:18,639

nasa centers to diversify both the

149

00:06:23,350 --> 00:06:21,440

science workforce generally and nasa's

150

00:06:24,950 --> 00:06:23,360

workforce in particular

151  
00:06:28,070 --> 00:06:24,960  
there's a dear colleague letter that

152  
00:06:29,430 --> 00:06:28,080  
went out recently asking for people to

153  
00:06:32,309 --> 00:06:29,440  
volunteer

154  
00:06:33,830 --> 00:06:32,319  
to serve on our organizing committee for

155  
00:06:35,350 --> 00:06:33,840  
a couple of workshops we're going to be

156  
00:06:37,110 --> 00:06:35,360  
doing to try to hear

157  
00:06:40,230 --> 00:06:37,120  
from the community

158  
00:06:42,309 --> 00:06:40,240  
what they want in a bridge program

159  
00:06:44,550 --> 00:06:42,319  
if you're interested i do encourage you

160  
00:06:45,749 --> 00:06:44,560  
to send in your application we will be

161  
00:06:47,510 --> 00:06:45,759  
providing

162  
00:06:49,830 --> 00:06:47,520  
travel if there is any travel involved

163  
00:06:52,070 --> 00:06:49,840

we'll be providing travel as well as

164

00:06:53,589 --> 00:06:52,080

generous honoraria

165

00:06:55,909 --> 00:06:53,599

and finally

166

00:06:57,589 --> 00:06:55,919

we are in the process smd of having a

167

00:06:59,430 --> 00:06:57,599

much greater presence at a variety of

168

00:07:02,550 --> 00:06:59,440

meetings like sacness national

169

00:07:04,550 --> 00:07:02,560

association of black physicists so on

170

00:07:06,710 --> 00:07:04,560

lori i know we'll tell you a little bit

171

00:07:07,830 --> 00:07:06,720

about some great work they're doing with

172

00:07:11,350 --> 00:07:07,840

the national association of black

173

00:07:16,150 --> 00:07:14,309

we have a new forthcoming program icor

174

00:07:19,670 --> 00:07:16,160

has anybody here ever heard of the nsf

175

00:07:22,150 --> 00:07:19,680

program icor can i see a show of hands

176

00:07:22,870 --> 00:07:22,160

a couple that's about what i expected

177

00:07:25,990 --> 00:07:22,880

so

178

00:07:28,469 --> 00:07:26,000

icore is a 10 year old nsf program that

179

00:07:30,710 --> 00:07:28,479

uses experiential learning to help

180

00:07:33,749 --> 00:07:30,720

researchers gain insights into

181

00:07:35,510 --> 00:07:33,759

entrepreneurship starting a business or

182

00:07:37,029 --> 00:07:35,520

how to interact with the industry

183

00:07:40,309 --> 00:07:37,039

partners

184

00:07:41,990 --> 00:07:40,319

the nasa pilot is a pilot program it's

185

00:07:43,990 --> 00:07:42,000

going to aim to reduce the time and risk

186

00:07:45,990 --> 00:07:44,000

of translating ideas and technology from

187

00:07:48,150 --> 00:07:46,000

the lab to the marketplace we're going

188

00:07:50,950 --> 00:07:48,160

to be doing this through uh

189

00:07:53,110 --> 00:07:50,960

two phase training grants the first

190

00:07:55,670 --> 00:07:53,120

phase is about ten thousand dollars to

191

00:07:58,390 --> 00:07:55,680

support a very very small team to go to

192

00:08:00,550 --> 00:07:58,400

an nsf regional short course

193

00:08:02,550 --> 00:08:00,560

and then we can augment that by up to

194

00:08:07,029 --> 00:08:02,560

40k to provide additional support for

195

00:08:08,950 --> 00:08:07,039

those who move on to the national course

196

00:08:10,629 --> 00:08:08,960

application for this program will be

197

00:08:12,790 --> 00:08:10,639

open only to higher education

198

00:08:15,189 --> 00:08:12,800

institutions and research nonprofits so

199

00:08:17,990 --> 00:08:15,199

unfortunately nasa's civil servants and

200

00:08:19,430 --> 00:08:18,000

other agencies civil servants currently

201  
00:08:21,189 --> 00:08:19,440  
cannot partici will not be able to

202  
00:08:23,029 --> 00:08:21,199  
participate

203  
00:08:25,189 --> 00:08:23,039  
the key thing is to demonstrate

204  
00:08:27,990 --> 00:08:25,199  
relevance to either nasa science mission

205  
00:08:29,589 --> 00:08:28,000  
directorate objectives or nasa space

206  
00:08:30,869 --> 00:08:29,599  
technology mission directorate

207  
00:08:32,709 --> 00:08:30,879  
objectives

208  
00:08:35,509 --> 00:08:32,719  
this announcement will be going out very

209  
00:08:39,750 --> 00:08:37,909  
another new piece of re of information

210  
00:08:42,389 --> 00:08:39,760  
how many of you have wrestled with

211  
00:08:46,470 --> 00:08:42,399  
submitting proposals to pub space

212  
00:08:48,949 --> 00:08:46,480  
the nasa part of pubmed

213  
00:08:50,949 --> 00:08:48,959

you all should have had problems because

214

00:08:53,670 --> 00:08:50,959

you all should be submitting proposed

215

00:08:55,509 --> 00:08:53,680

submitting your papers to it

216

00:08:57,350 --> 00:08:55,519

well

217

00:08:59,110 --> 00:08:57,360

hopefully for many of us that will be a

218

00:09:01,509 --> 00:08:59,120

thing of the past

219

00:09:02,949 --> 00:09:01,519

we are entering into a partnership with

220

00:09:05,190 --> 00:09:02,959

something called the clearinghouse for

221

00:09:06,550 --> 00:09:05,200

the open research of the united states

222

00:09:09,430 --> 00:09:06,560

chorus

223

00:09:11,750 --> 00:09:09,440

this is a publishing group composed of

224

00:09:14,550 --> 00:09:11,760

most of the major

225

00:09:16,470 --> 00:09:14,560

journal publishers

226  
00:09:18,470 --> 00:09:16,480  
once the agreement is finalized

227  
00:09:21,509 --> 00:09:18,480  
publishing in a course affiliated

228  
00:09:25,670 --> 00:09:21,519  
journal will automagically

229  
00:09:28,790 --> 00:09:25,680  
put your proposal your paper into

230  
00:09:30,790 --> 00:09:28,800  
an accessible space and so you will meet

231  
00:09:33,190 --> 00:09:30,800  
nasa's requirements

232  
00:09:36,310 --> 00:09:33,200  
uh it's expected that the course covers

233  
00:09:38,389 --> 00:09:36,320  
about 90 percent of nasa publications

234  
00:09:41,350 --> 00:09:38,399  
it you know includes major publishers

235  
00:09:43,350 --> 00:09:41,360  
like double a s agu springer el sevier

236  
00:09:44,870 --> 00:09:43,360  
and iop

237  
00:09:46,870 --> 00:09:44,880  
unfortunately if you publish in a

238  
00:09:48,790 --> 00:09:46,880

journal that's not a course published by

239

00:09:50,870 --> 00:09:48,800

a chorus member you will still have to

240

00:09:53,190 --> 00:09:50,880

go through

241

00:09:55,190 --> 00:09:53,200

pub space but they are building a new

242

00:09:56,389 --> 00:09:55,200

interface that is supposed to be easier

243

00:09:58,230 --> 00:09:56,399

to use

244

00:10:00,790 --> 00:09:58,240

the office of the chief scientist of

245

00:10:02,630 --> 00:10:00,800

nasa will be announcing this very soon

246

00:10:05,110 --> 00:10:02,640

and once it's announced we will alter

247

00:10:08,150 --> 00:10:05,120

the language of the roses solicitation

248

00:10:11,030 --> 00:10:08,160

to say go to chorus not

249

00:10:14,870 --> 00:10:11,040

go to pub space

250

00:10:20,630 --> 00:10:17,910

starting in about 2019 we began a series

251  
00:10:23,829 --> 00:10:20,640  
of things called pi launch pads

252  
00:10:25,110 --> 00:10:23,839  
these are uh intensive

253  
00:10:27,190 --> 00:10:25,120  
multi-day

254  
00:10:28,870 --> 00:10:27,200  
events where

255  
00:10:31,110 --> 00:10:28,880  
we it's that are focused on helping

256  
00:10:32,550 --> 00:10:31,120  
researchers who have the beginnings of a

257  
00:10:35,509 --> 00:10:32,560  
flight mission idea

258  
00:10:37,829 --> 00:10:35,519  
take that mission idea to the next level

259  
00:10:39,750 --> 00:10:37,839  
we work on elevator pitches

260  
00:10:40,870 --> 00:10:39,760  
we work on what an elevator pitch is if

261  
00:10:42,790 --> 00:10:40,880  
you don't know

262  
00:10:44,310 --> 00:10:42,800  
we work on issues and how to assemble a

263  
00:10:46,150 --> 00:10:44,320

team

264

00:10:48,550 --> 00:10:46,160

what support you should expect and

265

00:10:49,990 --> 00:10:48,560

demand from your home institution

266

00:10:52,230 --> 00:10:50,000

structured net we also provide

267

00:10:53,990 --> 00:10:52,240

structured networking opportunities for

268

00:10:57,350 --> 00:10:54,000

nasa centers other mission management

269

00:10:59,030 --> 00:10:57,360

centers and aerospace companies

270

00:11:00,470 --> 00:10:59,040

um we're going to be holding in the next

271

00:11:03,110 --> 00:11:00,480

one

272

00:11:06,069 --> 00:11:03,120

in june of 2023 at the university of

273

00:11:08,470 --> 00:11:06,079

michigan in ann arbor

274

00:11:11,430 --> 00:11:08,480

pretty much almost everything from the

275

00:11:13,910 --> 00:11:11,440

first two pi launch pads are available

276

00:11:16,949 --> 00:11:13,920

online so this includes the slides that

277

00:11:19,990 --> 00:11:16,959

were presented the videos of the talks

278

00:11:21,509 --> 00:11:20,000

and the workbooks that we gave out to

279

00:11:23,829 --> 00:11:21,519

participants

280

00:11:26,829 --> 00:11:23,839

and that's the link so basically if you

281

00:11:29,269 --> 00:11:26,839

go to [sciencenasa.gov](http://sciencenasa.gov) researchers pi

282

00:11:30,949 --> 00:11:29,279

launchpad and there's a wealth of

283

00:11:31,750 --> 00:11:30,959

material there if you're interested in

284

00:11:33,910 --> 00:11:31,760

ever

285

00:11:35,509 --> 00:11:33,920

putting together a mission

286

00:11:38,710 --> 00:11:35,519

so please be on the lookout for the next

287

00:11:40,710 --> 00:11:38,720

call for applications it should come out

288

00:11:42,870 --> 00:11:40,720

late this year

289

00:11:45,430 --> 00:11:42,880

important point to warn you about the

290

00:11:47,509 --> 00:11:45,440

application focuses very very little on

291

00:11:49,829 --> 00:11:47,519

on the science of your mission

292

00:11:52,470 --> 00:11:49,839

it focuses mostly on the leadership

293

00:11:55,110 --> 00:11:52,480

aspects of mission of running a mission

294

00:11:57,350 --> 00:11:55,120

because you can always get technical

295

00:11:59,910 --> 00:11:57,360

knowledge by the yard

296

00:12:02,629 --> 00:11:59,920

but being able to lead a team in an

297

00:12:04,550 --> 00:12:02,639

effective and inclusive manner

298

00:12:06,389 --> 00:12:04,560

is something that a lot of scientists

299

00:12:08,389 --> 00:12:06,399

and engineers have not really been

300

00:12:09,829 --> 00:12:08,399

trained to do and so that's one of the

301

00:12:11,190 --> 00:12:09,839

things that the application is going to

302

00:12:12,550 --> 00:12:11,200

focus on is

303

00:12:15,430 --> 00:12:12,560

have you thought about some of these

304

00:12:19,430 --> 00:12:17,990

so it's now my pleasure to introduce dr

305

00:12:25,269 --> 00:12:19,440

lori glaze

306

00:12:27,350 --> 00:12:25,279

planetary science division at um

307

00:12:36,829 --> 00:12:27,360

nasa science mission directorate

308

00:12:43,910 --> 00:12:40,629

great thank you michael and it is so

309

00:12:46,310 --> 00:12:43,920

good to be here at absycon i really am

310

00:12:47,670 --> 00:12:46,320

excited to be invited to to come talk to

311

00:12:51,509 --> 00:12:47,680

you all this year

312

00:12:52,949 --> 00:12:51,519

um i had hoped to come talk to you a

313

00:12:55,670 --> 00:12:52,959

year ago and of course that didn't

314

00:12:57,430 --> 00:12:55,680

happen so we're we're here now so i'm

315

00:12:58,230 --> 00:12:57,440

really really happy to be here thank you

316

00:13:02,069 --> 00:12:58,240

for

317

00:13:04,069 --> 00:13:02,079

so i just wanted to give a little bit of

318

00:13:06,150 --> 00:13:04,079

an update of some things that are going

319

00:13:06,949 --> 00:13:06,160

on in the planetary science division i

320

00:13:11,509 --> 00:13:06,959

will

321

00:13:13,509 --> 00:13:11,519

attempt to kind of skew the emphasis on

322

00:13:15,750 --> 00:13:13,519

things that hopefully are of relevance

323

00:13:17,590 --> 00:13:15,760

to this particular audience but i always

324

00:13:19,670 --> 00:13:17,600

like to start with this chart this is

325

00:13:21,990 --> 00:13:19,680

our our overall

326

00:13:23,670 --> 00:13:22,000

planetary science fleet

327

00:13:25,910 --> 00:13:23,680

and what i like to tell folks and i say

328

00:13:28,790 --> 00:13:25,920

it all the time is it is an amazing time

329

00:13:30,949 --> 00:13:28,800

to be a planetary scientist

330

00:13:32,949 --> 00:13:30,959

you can see on this chart we have 38

331

00:13:34,870 --> 00:13:32,959

missions right now either in development

332

00:13:37,110 --> 00:13:34,880

or in operations that are planetary

333

00:13:38,949 --> 00:13:37,120

science missions some of those are led

334

00:13:40,870 --> 00:13:38,959

by nasa some of them are led by our

335

00:13:43,030 --> 00:13:40,880

international partners with nasa

336

00:13:45,590 --> 00:13:43,040

contributions but it really is an

337

00:13:47,430 --> 00:13:45,600

amazing fleet some incredible science

338

00:13:49,829 --> 00:13:47,440

that's being done and will be done by

339

00:13:51,750 --> 00:13:49,839

this fleet of spacecraft that span the

340

00:13:53,030 --> 00:13:51,760

solar system all the way from mercury

341

00:13:55,670 --> 00:13:53,040

out to

342

00:13:57,590 --> 00:13:55,680

beyond pluto into the kuiper belt

343

00:13:59,030 --> 00:13:57,600

so we'll talk a little bit about a

344

00:14:00,829 --> 00:13:59,040

couple of these

345

00:14:03,829 --> 00:14:00,839

i wanted to focus on some recent

346

00:14:05,990 --> 00:14:03,839

highlights hopefully folks here are are

347

00:14:09,030 --> 00:14:06,000

fully aware of the mars 2020

348

00:14:10,949 --> 00:14:09,040

perseverance mission which is on mars

349

00:14:12,550 --> 00:14:10,959

now today it's actually celebrated a

350

00:14:13,750 --> 00:14:12,560

year on the surface of mars back in

351  
00:14:15,509 --> 00:14:13,760  
february

352  
00:14:18,230 --> 00:14:15,519  
of course the main purpose of the

353  
00:14:21,030 --> 00:14:18,240  
perseverance mission is to search out

354  
00:14:23,269 --> 00:14:21,040  
the signs of past microbial life on mars

355  
00:14:24,710 --> 00:14:23,279  
and we specifically selected

356  
00:14:26,069 --> 00:14:24,720  
jezero crater

357  
00:14:27,829 --> 00:14:26,079  
as a place

358  
00:14:30,150 --> 00:14:27,839  
that has

359  
00:14:32,150 --> 00:14:30,160  
an environment that might have been or

360  
00:14:34,470 --> 00:14:32,160  
should have been conducive to life

361  
00:14:36,470 --> 00:14:34,480  
forming on mars about three and a half

362  
00:14:38,150 --> 00:14:36,480  
billion years ago

363  
00:14:40,389 --> 00:14:38,160

you can see on the top image here we've

364

00:14:42,230 --> 00:14:40,399

been spending the last year

365

00:14:44,230 --> 00:14:42,240

exploring the crater floor and trying to

366

00:14:46,550 --> 00:14:44,240

set the context for that habitability

367

00:14:48,230 --> 00:14:46,560

what was the environment like

368

00:14:50,949 --> 00:14:48,240

at the time that there was standing

369

00:14:52,710 --> 00:14:50,959

water in this crater on mars you can see

370

00:14:54,949 --> 00:14:52,720

our wheel tracks going off into the

371

00:14:56,870 --> 00:14:54,959

distance there as we've been traversing

372

00:14:58,389 --> 00:14:56,880

across the crater floor

373

00:14:59,910 --> 00:14:58,399

and in the bottom image you can see as

374

00:15:01,590 --> 00:14:59,920

we've turned around now and looking

375

00:15:05,110 --> 00:15:01,600

forward we've been

376

00:15:08,310 --> 00:15:05,120

quickly progressing and traversing

377

00:15:10,550 --> 00:15:08,320

around to a river delta that is in the

378

00:15:12,389 --> 00:15:10,560

crater where there's

379

00:15:14,389 --> 00:15:12,399

signs that a river

380

00:15:16,230 --> 00:15:14,399

was flowing into that standing body of

381

00:15:17,110 --> 00:15:16,240

water and then depositing its sediments

382

00:15:18,310 --> 00:15:17,120

there

383

00:15:20,389 --> 00:15:18,320

of course that river would have had a

384

00:15:22,310 --> 00:15:20,399

very large catchment area and it is

385

00:15:24,470 --> 00:15:22,320

evidence that water actually persisted

386

00:15:25,990 --> 00:15:24,480

on the surface of mars for long enough

387

00:15:28,389 --> 00:15:26,000

and in the time frame that life was

388

00:15:31,590 --> 00:15:28,399

forming on earth that potentially life

389

00:15:33,749 --> 00:15:31,600

may have started to take hold um on mars

390

00:15:36,069 --> 00:15:33,759

and you can see in the foreground there

391

00:15:37,910 --> 00:15:36,079

a remnant of that delta but you can see

392

00:15:40,150 --> 00:15:37,920

kind of in the middle distance the

393

00:15:41,590 --> 00:15:40,160

actual delta front the flow front which

394

00:15:43,430 --> 00:15:41,600

i think is incredible you can see the

395

00:15:46,069 --> 00:15:43,440

layers of sedimentary deposits within

396

00:15:49,269 --> 00:15:46,079

that delta and we're now on the verge of

397

00:15:51,030 --> 00:15:49,279

getting ready to explore up a gully

398

00:15:52,310 --> 00:15:51,040

to actually look through the various

399

00:15:53,749 --> 00:15:52,320

profiles

400

00:15:56,150 --> 00:15:53,759

through that through that delta and look

401  
00:15:57,430 --> 00:15:56,160  
for those signs of past microbial life i

402  
00:15:59,350 --> 00:15:57,440  
wanted to point out of course that i

403  
00:16:00,870 --> 00:15:59,360  
believe state katie stack morgan and

404  
00:16:02,389 --> 00:16:00,880  
minnie wadwa are speaking tomorrow

405  
00:16:04,629 --> 00:16:02,399  
morning and i imagine you'll get to hear

406  
00:16:05,430 --> 00:16:04,639  
a lot more about this mission one of the

407  
00:16:07,509 --> 00:16:05,440  
key

408  
00:16:08,470 --> 00:16:07,519  
uh objectives of this mission is also to

409  
00:16:09,749 --> 00:16:08,480  
not only

410  
00:16:11,910 --> 00:16:09,759  
take measurements and look at the

411  
00:16:14,150 --> 00:16:11,920  
deposits in situ on this on the surface

412  
00:16:15,910 --> 00:16:14,160  
of mars but to collect some samples that

413  
00:16:17,990 --> 00:16:15,920

will eventually be returned back to

414

00:16:20,069 --> 00:16:18,000

earth from the mars sample return

415

00:16:22,949 --> 00:16:20,079

program and so we're really excited

416

00:16:26,069 --> 00:16:22,959

about that mars sample return mission it

417

00:16:28,470 --> 00:16:26,079

is underway in phase a of development um

418

00:16:30,150 --> 00:16:28,480

with expectation that it would launch at

419

00:16:32,389 --> 00:16:30,160

the end of this decade in partnership

420

00:16:34,710 --> 00:16:32,399

with european space agency

421

00:16:37,189 --> 00:16:34,720

fly to mars collect those samples that

422

00:16:39,509 --> 00:16:37,199

perseverance has been taking and bring

423

00:16:41,670 --> 00:16:39,519

them back here to earth so that's pretty

424

00:16:43,670 --> 00:16:41,680

exciting times to realize a dream that

425

00:16:45,990 --> 00:16:43,680

we've had for for decades and decades to

426  
00:16:48,230 --> 00:16:46,000  
bring a sample back from mars

427  
00:16:52,470 --> 00:16:48,240  
i wanted to speak for a moment about our

428  
00:16:54,470 --> 00:16:52,480  
partner uh asteroid missions osiris-rex

429  
00:16:56,470 --> 00:16:54,480  
which is the u.s mission in hayabusa ii

430  
00:16:58,470 --> 00:16:56,480  
which is a mission led by the japanese

431  
00:17:00,710 --> 00:16:58,480  
space agency jaxa

432  
00:17:02,629 --> 00:17:00,720  
both of these missions visited asteroids

433  
00:17:04,710 --> 00:17:02,639  
in the over the last several years and

434  
00:17:07,029 --> 00:17:04,720  
were able to collect samples of those

435  
00:17:09,510 --> 00:17:07,039  
asteroids to bring back to earth again

436  
00:17:11,189 --> 00:17:09,520  
these asteroids being you know carrying

437  
00:17:13,429 --> 00:17:11,199  
remnants of the earliest part of our

438  
00:17:16,150 --> 00:17:13,439

solar system and hopefully being able to

439

00:17:17,590 --> 00:17:16,160

provide us insights into the

440

00:17:19,669 --> 00:17:17,600

the building blocks for life that may

441

00:17:21,590 --> 00:17:19,679

have been delivered um by these um

442

00:17:24,710 --> 00:17:21,600

asteroids to earth and other bodies in

443

00:17:26,870 --> 00:17:24,720

the solar system as well as uh the the

444

00:17:28,710 --> 00:17:26,880

water that would have been um delivered

445

00:17:30,150 --> 00:17:28,720

um to the various planets that could

446

00:17:31,830 --> 00:17:30,160

have been the seeds for the oceans that

447

00:17:34,390 --> 00:17:31,840

we have today

448

00:17:36,630 --> 00:17:34,400

the samples from the hayabusa 2 mission

449

00:17:39,990 --> 00:17:36,640

were delivered to earth

450

00:17:41,430 --> 00:17:40,000

in december of 2020

451  
00:17:43,270 --> 00:17:41,440  
and they've been

452  
00:17:45,110 --> 00:17:43,280  
the teams have been analyzing and doing

453  
00:17:47,110 --> 00:17:45,120  
some great work with those samples and

454  
00:17:49,110 --> 00:17:47,120  
we're actually sharing samples between

455  
00:17:50,390 --> 00:17:49,120  
jaxa and nasa and the nasa portion of

456  
00:17:52,549 --> 00:17:50,400  
that sample

457  
00:17:55,350 --> 00:17:52,559  
was delivered to nasa to johnson space

458  
00:17:57,270 --> 00:17:55,360  
center in december of 2021 so that's an

459  
00:18:00,789 --> 00:17:57,280  
exciting step there on hayabusa 2

460  
00:18:02,870 --> 00:18:00,799  
osiris-rex is still winging its way back

461  
00:18:06,150 --> 00:18:02,880  
from asteroid bennu and expected to

462  
00:18:08,870 --> 00:18:06,160  
deliver those samples in the fall of

463  
00:18:10,950 --> 00:18:08,880

2023 so we're anxiously awaiting those

464

00:18:12,950 --> 00:18:10,960

samples to be delivered back here as

465

00:18:15,190 --> 00:18:12,960

well again allowing us to use the full

466

00:18:17,029 --> 00:18:15,200

breadth of our analytic capabilities

467

00:18:19,190 --> 00:18:17,039

here on earth and take advantage of the

468

00:18:22,710 --> 00:18:19,200

entire scientific community around the

469

00:18:28,150 --> 00:18:25,990

looking ahead we have some amazing and

470

00:18:29,830 --> 00:18:28,160

incredible missions coming up that

471

00:18:31,830 --> 00:18:29,840

michael kind of alluded to in his

472

00:18:33,669 --> 00:18:31,840

opening remarks

473

00:18:35,270 --> 00:18:33,679

first and foremost europa clipper which

474

00:18:37,669 --> 00:18:35,280

is our next big

475

00:18:38,630 --> 00:18:37,679

so-called flagship or directed strategic

476

00:18:41,270 --> 00:18:38,640

mission

477

00:18:43,270 --> 00:18:41,280

it's moving towards a launch in 2024 so

478

00:18:45,270 --> 00:18:43,280

that's coming up quick it's getting here

479

00:18:47,270 --> 00:18:45,280

it's going to be here soon europa

480

00:18:49,590 --> 00:18:47,280

clipper is a mission to fly a spacecraft

481

00:18:52,630 --> 00:18:49,600

that will go into orbit around jupiter

482

00:18:54,789 --> 00:18:52,640

and then execute multiple flybys of

483

00:18:56,470 --> 00:18:54,799

jupiter's moon europa

484

00:18:58,870 --> 00:18:56,480

it's equipped with

485

00:19:01,510 --> 00:18:58,880

an incredible suite of instruments that

486

00:19:04,310 --> 00:19:01,520

will map out uh the composition of the

487

00:19:06,870 --> 00:19:04,320

materials on the ice of europa on its

488

00:19:08,870 --> 00:19:06,880

ice crust it will help to measure the

489

00:19:10,710 --> 00:19:08,880

thickness of that icy crust it will help

490

00:19:12,470 --> 00:19:10,720

to help us understand the depth and

491

00:19:15,510 --> 00:19:12,480

salinity of the ocean

492

00:19:17,590 --> 00:19:15,520

on europa and help us really understand

493

00:19:20,789 --> 00:19:17,600

just how habitable that environment is

494

00:19:22,150 --> 00:19:20,799

today for life on europa

495

00:19:24,310 --> 00:19:22,160

it says here on the chart they entered

496

00:19:26,630 --> 00:19:24,320

into their assembly test and launch

497

00:19:27,990 --> 00:19:26,640

operations or atlo in march of this year

498

00:19:29,750 --> 00:19:28,000

meaning they're really starting to pull

499

00:19:31,430 --> 00:19:29,760

the hardware together from that

500

00:19:33,110 --> 00:19:31,440

spacecraft and build the spacecraft and

501  
00:19:35,430 --> 00:19:33,120  
getting it ready for launch

502  
00:19:36,630 --> 00:19:35,440  
i wanted to mention dragonfly

503  
00:19:38,470 --> 00:19:36,640  
one

504  
00:19:40,470 --> 00:19:38,480  
interesting part about fl dragonfly is

505  
00:19:42,630 --> 00:19:40,480  
that i believe that that was announced

506  
00:19:46,310 --> 00:19:42,640  
the selection of dragonfly three years

507  
00:19:48,950 --> 00:19:46,320  
ago here at absycon the one that uh

508  
00:19:51,350 --> 00:19:48,960  
michael was referring to in seattle um

509  
00:19:53,270 --> 00:19:51,360  
that uh that amazing announcement we

510  
00:19:55,590 --> 00:19:53,280  
were so excited about the selection of

511  
00:19:57,669 --> 00:19:55,600  
dragonfly which really is uh an

512  
00:20:00,710 --> 00:19:57,679  
incredible mission to explore titan the

513  
00:20:02,390 --> 00:20:00,720

moon of saturn um a organic rich

514

00:20:05,350 --> 00:20:02,400

environment um

515

00:20:08,549 --> 00:20:05,360

to fly a dual uh

516

00:20:10,710 --> 00:20:08,559

dual quadcopter rotor craft on

517

00:20:12,710 --> 00:20:10,720

titan and explore

518

00:20:15,110 --> 00:20:12,720

the the chemistry and the environment

519

00:20:16,070 --> 00:20:15,120

the habitability of the environment on

520

00:20:18,070 --> 00:20:16,080

titan

521

00:20:19,990 --> 00:20:18,080

it's moving forward really well i know i

522

00:20:21,270 --> 00:20:20,000

saw the pi here earlier today i don't

523

00:20:22,630 --> 00:20:21,280

know if she's in the audience right now

524

00:20:24,710 --> 00:20:22,640

but zibby turtle

525

00:20:26,070 --> 00:20:24,720

is around here i'm sure she'd be happy

526  
00:20:27,830 --> 00:20:26,080  
to tell you as much as you want to hear

527  
00:20:30,470 --> 00:20:27,840  
about this incredible mission that

528  
00:20:32,070 --> 00:20:30,480  
expected to launch in 2027

529  
00:20:32,950 --> 00:20:32,080  
and then lastly i wanted to mention that

530  
00:20:35,990 --> 00:20:32,960  
just

531  
00:20:38,470 --> 00:20:36,000  
a year ago or so we selected

532  
00:20:40,230 --> 00:20:38,480  
two missions to fly to venus

533  
00:20:42,470 --> 00:20:40,240  
through the discovery program it's been

534  
00:20:44,310 --> 00:20:42,480  
a long long long time since the u.s sent

535  
00:20:45,830 --> 00:20:44,320  
a mission to venus and there's a lot of

536  
00:20:47,750 --> 00:20:45,840  
exciting science

537  
00:20:49,510 --> 00:20:47,760  
to be conducted at venus the two

538  
00:20:51,750 --> 00:20:49,520

missions you can see on the left at the

539

00:20:53,029 --> 00:20:51,760

bottom right is the veritas mission to

540

00:20:54,870 --> 00:20:53,039

fly

541

00:20:57,430 --> 00:20:54,880

a radar system that will map out the

542

00:20:59,510 --> 00:20:57,440

topography of the surface of venus and

543

00:21:02,070 --> 00:20:59,520

also carry spectrometers to get a sense

544

00:21:03,990 --> 00:21:02,080

of the surface composition and then da

545

00:21:05,430 --> 00:21:04,000

vinci shown on the bottom right is a

546

00:21:08,070 --> 00:21:05,440

probe to enter down through the

547

00:21:10,870 --> 00:21:08,080

atmosphere i'm collecting in-situ

548

00:21:12,950 --> 00:21:10,880

measurements of the atmosphere

549

00:21:14,630 --> 00:21:12,960

and giving us a detailed profile of that

550

00:21:16,470 --> 00:21:14,640

composition

551  
00:21:19,510 --> 00:21:16,480  
the combined those two visions are going

552  
00:21:22,230 --> 00:21:19,520  
to give us a great sense of insight into

553  
00:21:23,750 --> 00:21:22,240  
the habitability in venus's past in a

554  
00:21:25,830 --> 00:21:23,760  
sense of what the environment is like

555  
00:21:28,470 --> 00:21:25,840  
there today and i'm sure this community

556  
00:21:31,110 --> 00:21:28,480  
is aware that um a while back there was

557  
00:21:34,390 --> 00:21:31,120  
a lot of interest around whether or not

558  
00:21:36,870 --> 00:21:34,400  
venus's clouds might be habitable today

559  
00:21:38,870 --> 00:21:36,880  
and i have being someone who came from

560  
00:21:41,750 --> 00:21:38,880  
the venus community at one point in my

561  
00:21:43,029 --> 00:21:41,760  
past i've encouraged that community to

562  
00:21:44,390 --> 00:21:43,039  
to make sure they're making real

563  
00:21:46,390 --> 00:21:44,400

connections and working with and

564

00:21:48,070 --> 00:21:46,400

collaborating with card carrying

565

00:21:49,430 --> 00:21:48,080

astrobiologists to help them really

566

00:21:52,630 --> 00:21:49,440

understand

567

00:21:54,390 --> 00:21:52,640

the realism of that of that particular

568

00:21:56,310 --> 00:21:54,400

line of thought so i want to encourage

569

00:21:57,830 --> 00:21:56,320

this community as well

570

00:21:59,750 --> 00:21:57,840

that if you have an interest to please

571

00:22:01,830 --> 00:21:59,760

work with those venus scientists to help

572

00:22:04,470 --> 00:22:01,840

keep them on the straight and narrow as

573

00:22:07,350 --> 00:22:04,480

they are trying to navigate

574

00:22:09,669 --> 00:22:07,360

some interesting waters there

575

00:22:11,510 --> 00:22:09,679

um lastly i know that you guys uh had a

576

00:22:13,110 --> 00:22:11,520

presentation whether it was this morning

577

00:22:15,190 --> 00:22:13,120

on the decadal survey so i can't tell

578

00:22:15,990 --> 00:22:15,200

you anything that they uh didn't already

579

00:22:17,990 --> 00:22:16,000

say

580

00:22:21,190 --> 00:22:18,000

we are really excited about this new

581

00:22:22,870 --> 00:22:21,200

decadal survey it's uh got so many uh

582

00:22:26,390 --> 00:22:22,880

aspirational goals and we're in the

583

00:22:29,350 --> 00:22:26,400

process of digesting all uh 700 or so

584

00:22:30,789 --> 00:22:29,360

pages right now to help us

585

00:22:33,110 --> 00:22:30,799

figure out what our next plans are going

586

00:22:34,630 --> 00:22:33,120

to be we expect to start communicating

587

00:22:36,310 --> 00:22:34,640

with the public

588

00:22:38,549 --> 00:22:36,320

and the science community

589

00:22:40,789 --> 00:22:38,559

mid-summer about what our preliminary

590

00:22:43,510 --> 00:22:40,799

response is to that incredible decadal

591

00:22:45,590 --> 00:22:43,520

survey so please look forward to that

592

00:22:47,909 --> 00:22:45,600

and then finally i know michael spoke to

593

00:22:50,870 --> 00:22:47,919

some of the idea activities that are

594

00:22:52,710 --> 00:22:50,880

going on at smd he mentioned the

595

00:22:54,230 --> 00:22:52,720

national association of black

596

00:22:55,750 --> 00:22:54,240

physicists that's something that within

597

00:22:57,990 --> 00:22:55,760

planetary science division we are

598

00:22:59,510 --> 00:22:58,000

working and having regular conversations

599

00:23:01,270 --> 00:22:59,520

with the leadership of that leadership

600

00:23:03,510 --> 00:23:01,280

of that organization and trying to find

601  
00:23:05,270 --> 00:23:03,520  
better ways to engage um with that

602  
00:23:06,630 --> 00:23:05,280  
important community

603  
00:23:08,470 --> 00:23:06,640  
i'm not going to speak to this slide in

604  
00:23:11,430 --> 00:23:08,480  
particular but i would like to encourage

605  
00:23:13,990 --> 00:23:11,440  
folks to um to come to lawan moore's

606  
00:23:15,430 --> 00:23:14,000  
talk at one o'clock or 108 on wednesday

607  
00:23:18,789 --> 00:23:15,440  
where she's going to detail some of the

608  
00:23:20,390 --> 00:23:18,799  
other activities in the idea area within

609  
00:23:23,990 --> 00:23:20,400  
planetary science

610  
00:23:25,590 --> 00:23:24,000  
and so with that i am going to

611  
00:23:28,470 --> 00:23:25,600  
pause for now and i think we're handing

612  
00:23:34,830 --> 00:23:28,480  
it over to mary wojtek

613  
00:23:40,630 --> 00:23:37,750

okay um

614

00:23:42,870 --> 00:23:40,640

everything looks ready to go

615

00:23:45,909 --> 00:23:42,880

uh so

616

00:23:47,830 --> 00:23:45,919

we're really excited that lori and

617

00:23:49,350 --> 00:23:47,840

michael are able to join us

618

00:23:51,430 --> 00:23:49,360

um we're gonna spend some time now

619

00:23:53,590 --> 00:23:51,440

talking about our programs but

620

00:23:54,870 --> 00:23:53,600

mainly focusing on highlights or changes

621

00:23:56,710 --> 00:23:54,880

for the future

622

00:23:59,029 --> 00:23:56,720

uh things that we need you as our

623

00:24:01,269 --> 00:23:59,039

community to really pay attention to

624

00:24:03,750 --> 00:24:01,279

to be as engaged as you possibly can in

625

00:24:05,669 --> 00:24:03,760

this really exciting time

626

00:24:06,630 --> 00:24:05,679

for astrobiology

627

00:24:14,870 --> 00:24:06,640

so

628

00:24:16,070 --> 00:24:14,880

outline of what we're going to talk

629

00:24:17,990 --> 00:24:16,080

about

630

00:24:19,750 --> 00:24:18,000

and actually although i'm up here first

631

00:24:20,950 --> 00:24:19,760

talking i just wanted to welcome you

632

00:24:24,149 --> 00:24:20,960

tell you how

633

00:24:26,149 --> 00:24:24,159

how sad i am not to be there with you um

634

00:24:28,070 --> 00:24:26,159

and and get the opportunity all week to

635

00:24:29,510 --> 00:24:28,080

talk you through some of the new things

636

00:24:31,190 --> 00:24:29,520

but we're gonna see if we can't cover

637

00:24:33,750 --> 00:24:31,200

some of that now and you know that all

638

00:24:35,750 --> 00:24:33,760

of us are always open to being contacted

639

00:24:36,789 --> 00:24:35,760

and talking to you whenever you need to

640

00:24:38,870 --> 00:24:36,799

but the first thing we're going to talk

641

00:24:41,830 --> 00:24:38,880

about is some new overall requirements

642

00:24:44,149 --> 00:24:41,840

in the planetary sciences rna program

643

00:24:46,230 --> 00:24:44,159

we'll go through some specifics for

644

00:24:47,669 --> 00:24:46,240

programs that we have we want to talk a

645

00:24:49,269 --> 00:24:47,679

little bit about

646

00:24:51,990 --> 00:24:49,279

some other opportunities for you to get

647

00:24:54,390 --> 00:24:52,000

involved opportunities for early career

648

00:24:56,230 --> 00:24:54,400

people and opportunities to get involved

649

00:24:57,909 --> 00:24:56,240

in science communication and education

650

00:24:59,190 --> 00:24:57,919

and public engagement

651  
00:25:02,950 --> 00:24:59,200  
so i think the next person that's

652  
00:25:06,710 --> 00:25:04,870  
and thank you very much i hope you can

653  
00:25:08,789 --> 00:25:06,720  
see the next slide

654  
00:25:10,149 --> 00:25:08,799  
so the next slide is just as mary was

655  
00:25:11,510 --> 00:25:10,159  
saying a little bit about new

656  
00:25:13,430 --> 00:25:11,520  
requirements

657  
00:25:15,909 --> 00:25:13,440  
this slide is really serving two

658  
00:25:17,110 --> 00:25:15,919  
purposes here um the first is to give

659  
00:25:18,950 --> 00:25:17,120  
you guys a little bit of information

660  
00:25:20,549 --> 00:25:18,960  
about these new requirements the first

661  
00:25:22,710 --> 00:25:20,559  
of which that may be relevant to some of

662  
00:25:24,470 --> 00:25:22,720  
you is the requirement for field work

663  
00:25:26,230 --> 00:25:24,480

and that is proposers conducting field

664

00:25:27,669 --> 00:25:26,240

research must include a description of

665

00:25:29,190 --> 00:25:27,679

their use of field sites and that

666

00:25:31,750 --> 00:25:29,200

demonstrates and then we give you a

667

00:25:34,630 --> 00:25:31,760

little bit of specificity about the the

668

00:25:37,190 --> 00:25:34,640

um the field research plan that you must

669

00:25:41,430 --> 00:25:37,200

include as part of your proposal um and

670

00:25:44,310 --> 00:25:41,440

that can be found in section 3.5 or 3.15

671

00:25:47,590 --> 00:25:44,320

of c1 the second is about the science

672

00:25:49,990 --> 00:25:47,600

information policy this spd 41 describes

673

00:25:52,149 --> 00:25:50,000

how scientific information produced from

674

00:25:54,230 --> 00:25:52,159

smd funding is shared

675

00:25:55,909 --> 00:25:54,240

includes publications data and software

676  
00:25:58,870 --> 00:25:55,919  
produced as part of the scientific

677  
00:26:00,710 --> 00:25:58,880  
research um activities and the

678  
00:26:02,310 --> 00:26:00,720  
information that is important about both

679  
00:26:04,950 --> 00:26:02,320  
of these uh that was that's the sort of

680  
00:26:07,110 --> 00:26:04,960  
specificity um and just a one other note

681  
00:26:10,390 --> 00:26:07,120  
sorry about regarding the field work uh

682  
00:26:12,310 --> 00:26:10,400  
we are both uh asking this for um

683  
00:26:13,990 --> 00:26:12,320  
proposers that are being or proposals

684  
00:26:17,350 --> 00:26:14,000  
that are being written now um and that

685  
00:26:19,669 --> 00:26:17,360  
will be submitted in roses 22 as well as

686  
00:26:21,750 --> 00:26:19,679  
um work that is undergoing and we'll be

687  
00:26:22,950 --> 00:26:21,760  
uh reaching out to our community to

688  
00:26:25,190 --> 00:26:22,960

funded researchers within the

689

00:26:26,870 --> 00:26:25,200

astrobiology program and sort of and

690

00:26:29,350 --> 00:26:26,880

checking their plans for field work and

691

00:26:31,110 --> 00:26:29,360

making sure that it um that they have a

692

00:26:32,630 --> 00:26:31,120

plan that has reflects a lot of these

693

00:26:34,630 --> 00:26:32,640

things um

694

00:26:37,510 --> 00:26:34,640

regarding the science information policy

695

00:26:40,310 --> 00:26:37,520

spd 41a will be incorporated into roses

696

00:26:42,310 --> 00:26:40,320

23 so you should look for it there

697

00:26:43,590 --> 00:26:42,320

and the important thing about both of

698

00:26:46,310 --> 00:26:43,600

these things is to note of course that

699

00:26:48,630 --> 00:26:46,320

you always need to read c1 the way the

700

00:26:49,830 --> 00:26:48,640

nasa calls are are um

701  
00:26:51,350 --> 00:26:49,840  
are written

702  
00:26:53,990 --> 00:26:51,360  
is that they're sort of hierarchically

703  
00:26:58,149 --> 00:26:54,000  
organizing information so in addition to

704  
00:26:59,909 --> 00:26:58,159  
reading for example uh c.5 exobiology

705  
00:27:02,310 --> 00:26:59,919  
program call you should also be reading

706  
00:27:03,510 --> 00:27:02,320  
c1 which details information about all

707  
00:27:05,669 --> 00:27:03,520  
of the things that are relevant to the

708  
00:27:07,190 --> 00:27:05,679  
planetary science division calls as well

709  
00:27:08,310 --> 00:27:07,200  
as the guidebook for proposals so

710  
00:27:09,990 --> 00:27:08,320  
thinking about

711  
00:27:12,390 --> 00:27:10,000  
information that applies to all can be

712  
00:27:15,029 --> 00:27:12,400  
found in sort of hierarchical

713  
00:27:16,230 --> 00:27:15,039

## information guides

714

00:27:18,549 --> 00:27:16,240

i'm also going to be talking a little

715

00:27:20,389 --> 00:27:18,559

bit about the exobiology program

716

00:27:21,590 --> 00:27:20,399

so i am the lead for the exobiology

717

00:27:23,269 --> 00:27:21,600

program and this year i've been working

718

00:27:25,110 --> 00:27:23,279

primarily with jeff wheat who i

719

00:27:27,190 --> 00:27:25,120

understand is there so if you have any

720

00:27:28,389 --> 00:27:27,200

questions definitely um he's another

721

00:27:34,630 --> 00:27:28,399

person you can seek out for some

722

00:27:39,110 --> 00:27:37,269

i said ask jeff to stand up and wave oh

723

00:27:42,230 --> 00:27:39,120

jeff if you can stand up and wave while

724

00:27:43,990 --> 00:27:42,240

i continue that would be great um

725

00:27:45,990 --> 00:27:44,000

i can see them scoping the room there's

726

00:27:48,350 --> 00:27:46,000

jeff um somewhere this feels like the

727

00:27:51,190 --> 00:27:48,360

price is right okay um

728

00:27:53,669 --> 00:27:51,200

[Laughter]

729

00:27:55,830 --> 00:27:53,679

so uh we're working this year to execute

730

00:27:57,909 --> 00:27:55,840

the exobiology program as a no due dates

731

00:27:59,830 --> 00:27:57,919

program um and one of the benefits of

732

00:28:01,430 --> 00:27:59,840

this that we're really trying to hope

733

00:28:03,430 --> 00:28:01,440

that we see here is it'll enhance the

734

00:28:06,070 --> 00:28:03,440

ability of a wider range of pis to

735

00:28:07,590 --> 00:28:06,080

propose uh folks that may have personal

736

00:28:10,070 --> 00:28:07,600

issues that you know may come up right

737

00:28:12,149 --> 00:28:10,080

before a call or allow people at smaller

738

00:28:14,230 --> 00:28:12,159

universities to have a little bit less

739

00:28:16,549 --> 00:28:14,240

specificity about when they need to bug

740

00:28:18,470 --> 00:28:16,559

their aor about things um and so i

741

00:28:20,389 --> 00:28:18,480

wanted to address uh three common

742

00:28:23,430 --> 00:28:20,399

misconceptions or common questions i've

743

00:28:25,510 --> 00:28:23,440

had about exobiology and no due dates um

744

00:28:27,510 --> 00:28:25,520

the first is that you will notice that

745

00:28:30,470 --> 00:28:27,520

there is some overlap this year it's

746

00:28:33,830 --> 00:28:30,480

about about six weeks uh between the end

747

00:28:37,110 --> 00:28:33,840

of the roses 21 due dates call no due

748

00:28:39,430 --> 00:28:37,120

date uh call and the start of the roses

749

00:28:42,310 --> 00:28:39,440

22 call so the start of the rosa 222

750

00:28:45,669 --> 00:28:42,320

call was in about early mid-february the

751

00:28:47,830 --> 00:28:45,679

roses 21 exobiology call ended in uh

752

00:28:49,350 --> 00:28:47,840

sort of towards the end of march um that

753

00:28:51,350 --> 00:28:49,360

doesn't mean that there's actually a due

754

00:28:53,909 --> 00:28:51,360

date you can apply to either of them

755

00:28:56,070 --> 00:28:53,919

while they're open um if you have a

756

00:28:58,470 --> 00:28:56,080

concept and you started to get it in in

757

00:28:59,909 --> 00:28:58,480

the roses 21 call and you realize you

758

00:29:01,350 --> 00:28:59,919

weren't going to be able to get it in

759

00:29:02,710 --> 00:29:01,360

there's nothing if you didn't submit it

760

00:29:05,110 --> 00:29:02,720

yet you can always submit it in the

761

00:29:06,870 --> 00:29:05,120

roses 22 call but there's this is sort

762

00:29:08,389 --> 00:29:06,880

of an artificial due date but it really

763

00:29:10,070 --> 00:29:08,399

has nothing to do with our sort of

764

00:29:11,190 --> 00:29:10,080

rolling due dates

765

00:29:13,750 --> 00:29:11,200

that we have

766

00:29:16,149 --> 00:29:13,760

um additionally uh we are doing it's

767

00:29:18,149 --> 00:29:16,159

really really now due dates in that we

768

00:29:19,190 --> 00:29:18,159

are having regular reviews um so you

769

00:29:20,950 --> 00:29:19,200

should think about it like a bus

770

00:29:23,830 --> 00:29:20,960

schedule in a country where buses are

771

00:29:26,149 --> 00:29:23,840

frequently uh on time and the idea there

772

00:29:28,870 --> 00:29:26,159

being that uh if you don't get it in

773

00:29:30,630 --> 00:29:28,880

right now um or today there you know you

774

00:29:32,389 --> 00:29:30,640

may miss this particular review but the

775

00:29:34,149 --> 00:29:32,399

next review is happening in a very short

776

00:29:35,750 --> 00:29:34,159

time um so you'll be picked up in the

777

00:29:37,669 --> 00:29:35,760

next one we're not waiting for a

778

00:29:39,029 --> 00:29:37,679

particular number of proposals in order

779

00:29:41,110 --> 00:29:39,039

to run a review

780

00:29:43,029 --> 00:29:41,120

and then this also again means there

781

00:29:44,870 --> 00:29:43,039

really are new due dates with regards to

782

00:29:46,389 --> 00:29:44,880

selections and funding we will make

783

00:29:48,789 --> 00:29:46,399

selections regularly we have made

784

00:29:50,710 --> 00:29:48,799

selections regularly and we manage our

785

00:29:52,230 --> 00:29:50,720

funding throughout the year so it's not

786

00:29:53,510 --> 00:29:52,240

like if you don't get it in early

787

00:29:54,870 --> 00:29:53,520

there's going to be some problem with

788

00:29:56,630 --> 00:29:54,880

funding or anything so think about it

789

00:29:57,830 --> 00:29:56,640

like a household budget right you know

790

00:29:59,350 --> 00:29:57,840

you're going to get paid at the start of

791

00:30:00,870 --> 00:29:59,360

the month or at some point in the month

792

00:30:01,990 --> 00:30:00,880

um and you manage your expenses

793

00:30:04,149 --> 00:30:02,000

throughout

794

00:30:06,470 --> 00:30:04,159

i will note um our response times are

795

00:30:08,630 --> 00:30:06,480

slightly better on average uh than uh

796

00:30:12,230 --> 00:30:08,640

than previously so we're happy that this

797

00:30:13,590 --> 00:30:12,240

is um improving that uh that metric um

798

00:30:15,430 --> 00:30:13,600

and the other thing that's worth noting

799

00:30:17,590 --> 00:30:15,440

is that there is a one-year prohibition

800

00:30:20,310 --> 00:30:17,600

on resubmission so um if you're

801  
00:30:22,549 --> 00:30:20,320  
submitting a proposal that has um the

802  
00:30:25,909 --> 00:30:22,559  
same proposal scope this isn't you know

803  
00:30:27,350 --> 00:30:25,919  
you uh pi jones cannot submit again a

804  
00:30:28,549 --> 00:30:27,360  
different concept but if you are

805  
00:30:31,110 --> 00:30:28,559  
submitting the proposal that has the

806  
00:30:32,870 --> 00:30:31,120  
same proposal scope um and it was not

807  
00:30:34,710 --> 00:30:32,880  
selected you do you must wait a year

808  
00:30:37,430 --> 00:30:34,720  
from when you originally submitted to

809  
00:30:38,789 --> 00:30:37,440  
resubmit that um and then finally the

810  
00:30:41,110 --> 00:30:38,799  
thing i want to make note here is about

811  
00:30:43,269 --> 00:30:41,120  
external reviews for a number of reasons

812  
00:30:45,350 --> 00:30:43,279  
they are more important than ever before

813  
00:30:46,950 --> 00:30:45,360

um because of the spread of proposals we

814

00:30:48,950 --> 00:30:46,960

are having smaller panels and external

815

00:30:50,149 --> 00:30:48,960

reviews um become more important right

816

00:30:52,789 --> 00:30:50,159

we want to make sure that we're getting

817

00:30:55,350 --> 00:30:52,799

those expert reviews uh that we have uh

818

00:30:58,470 --> 00:30:55,360

that we've been that we do um and so

819

00:31:00,630 --> 00:30:58,480

please um if you are asked to serve and

820

00:31:02,630 --> 00:31:00,640

provide an external review uh please

821

00:31:04,310 --> 00:31:02,640

help please offer you know please agree

822

00:31:05,990 --> 00:31:04,320

to just to do that review if you can

823

00:31:07,269 --> 00:31:06,000

make it work and please take them

824

00:31:09,430 --> 00:31:07,279

seriously please provide as much

825

00:31:11,190 --> 00:31:09,440

information as you can

826  
00:31:13,350 --> 00:31:11,200  
and then just a general reminder more

827  
00:31:15,430 --> 00:31:13,360  
information about individual programs

828  
00:31:17,509 --> 00:31:15,440  
and psd rna as a whole can always be

829  
00:31:19,430 --> 00:31:17,519  
found at our regular pac meetings

830  
00:31:21,750 --> 00:31:19,440  
um and this is my last slide for now i'm

831  
00:31:25,430 --> 00:31:21,760  
going to be handing it over to becky who

832  
00:31:27,430 --> 00:31:25,440  
i believe is in the room um i am i think

833  
00:31:28,549 --> 00:31:27,440  
she should be there she is i will meet

834  
00:31:30,710 --> 00:31:28,559  
myself go ahead because all right

835  
00:31:32,149 --> 00:31:30,720  
perfect thanks thanks lindsay um so hi

836  
00:31:33,990 --> 00:31:32,159  
everyone it's been really great to to

837  
00:31:36,310 --> 00:31:34,000  
see so many familiar faces and meet so

838  
00:31:37,830 --> 00:31:36,320

many new people this week um

839

00:31:40,149 --> 00:31:37,840

last time i was at apps icon was in

840

00:31:41,990 --> 00:31:40,159

chicago so this has been really great um

841

00:31:42,950 --> 00:31:42,000

so i'm the program officer for habitable

842

00:31:44,710 --> 00:31:42,960

worlds

843

00:31:45,990 --> 00:31:44,720

and just wanted to share some things

844

00:31:49,110 --> 00:31:46,000

about that program that have changed

845

00:31:50,870 --> 00:31:49,120

recently so i'm starting with roses 2020

846

00:31:53,430 --> 00:31:50,880

have worlds moved to using the dual

847

00:31:55,590 --> 00:31:53,440

anonymous peer review process which

848

00:31:57,190 --> 00:31:55,600

michael mentioned earlier so some of you

849

00:31:59,669 --> 00:31:57,200

might have been through through that

850

00:32:01,669 --> 00:31:59,679

gauntlet at this point um but i did just

851  
00:32:04,310 --> 00:32:01,679  
want to share some some pointers on that

852  
00:32:06,710 --> 00:32:04,320  
especially uh since uh

853  
00:32:09,669 --> 00:32:06,720  
we'll be moving towards uh more programs

854  
00:32:11,190 --> 00:32:09,679  
using dual anonymous um so

855  
00:32:13,430 --> 00:32:11,200  
it's very important to submit a

856  
00:32:15,269 --> 00:32:13,440  
compliant proposal right in general this

857  
00:32:17,590 --> 00:32:15,279  
has been the case for a long time in

858  
00:32:19,029 --> 00:32:17,600  
terms of page counts and font sizes but

859  
00:32:21,509 --> 00:32:19,039  
that's also important in terms of

860  
00:32:23,190 --> 00:32:21,519  
anonymizing your proposal and that means

861  
00:32:26,149 --> 00:32:23,200  
that you need to spend a little bit more

862  
00:32:28,149 --> 00:32:26,159  
time um figuring out how to write such a

863  
00:32:30,230 --> 00:32:28,159

proposal it's a slightly different

864

00:32:31,669 --> 00:32:30,240

writing style that you may not be used

865

00:32:33,509 --> 00:32:31,679

to and so be prepared for that

866

00:32:35,990 --> 00:32:33,519

especially the first time you go to

867

00:32:37,590 --> 00:32:36,000

submit a proposal to a dual anonymous

868

00:32:39,110 --> 00:32:37,600

program

869

00:32:40,549 --> 00:32:39,120

and make sure you really pay attention

870

00:32:42,549 --> 00:32:40,559

to the rules right

871

00:32:44,389 --> 00:32:42,559

for for that anonymization

872

00:32:46,950 --> 00:32:44,399

so just as an example

873

00:32:49,269 --> 00:32:46,960

for habitable worlds 20 out of the 71

874

00:32:52,070 --> 00:32:49,279

proposals that were submitted we flagged

875

00:32:55,750 --> 00:32:52,080

16 proposals for non-compliance

876

00:32:58,149 --> 00:32:55,760

this was you know a wide range of issues

877

00:33:00,710 --> 00:32:58,159

anything from improperly blacked out

878

00:33:02,070 --> 00:33:00,720

text right so maybe a

879

00:33:04,630 --> 00:33:02,080

human reader

880

00:33:06,870 --> 00:33:04,640

can't see it but a computer can

881

00:33:08,630 --> 00:33:06,880

to minor infractions like improper

882

00:33:11,430 --> 00:33:08,640

citation formats

883

00:33:13,430 --> 00:33:11,440

to really egregious

884

00:33:15,669 --> 00:33:13,440

errors in terms of identifying the

885

00:33:17,590 --> 00:33:15,679

proposal team or the institution

886

00:33:19,909 --> 00:33:17,600

throughout the entire document

887

00:33:21,430 --> 00:33:19,919

so really want to help you avoid those

888

00:33:22,710 --> 00:33:21,440

issues and there's some really great

889

00:33:24,710 --> 00:33:22,720

resources

890

00:33:26,230 --> 00:33:24,720

at the link on this slide

891

00:33:28,630 --> 00:33:26,240

on the dual anonymous peer review

892

00:33:29,909 --> 00:33:28,640

process there's examples on the ways to

893

00:33:32,470 --> 00:33:29,919

to write

894

00:33:34,950 --> 00:33:32,480

and a really clear examples of

895

00:33:38,310 --> 00:33:34,960

the way that you should follow the rules

896

00:33:40,630 --> 00:33:38,320

next slide please

897

00:33:43,909 --> 00:33:40,640

so i'm also the planetary protection uh

898

00:33:46,549 --> 00:33:43,919

research manager um for uh planetary uh

899

00:33:48,950 --> 00:33:46,559

for well for smd um so planetary

900

00:33:50,710 --> 00:33:48,960

protection um some of you are probably

901  
00:33:53,190 --> 00:33:50,720  
very aware of what this is but some of

902  
00:33:54,870 --> 00:33:53,200  
you may not um so this is the practice

903  
00:33:57,750 --> 00:33:54,880  
of understanding and limiting

904  
00:33:59,830 --> 00:33:57,760  
terrestrial biological contamination

905  
00:34:01,590 --> 00:33:59,840  
throughout the solar system and making

906  
00:34:03,190 --> 00:34:01,600  
sure that we're protecting earth

907  
00:34:05,590 --> 00:34:03,200  
from possible life forms that could be

908  
00:34:08,230 --> 00:34:05,600  
returned on all of our awesome sample

909  
00:34:09,990 --> 00:34:08,240  
return missions um so we're interested

910  
00:34:11,990 --> 00:34:10,000  
in both carefully controlling that

911  
00:34:13,909 --> 00:34:12,000  
forward contamination so terrestrial

912  
00:34:16,710 --> 00:34:13,919  
life going out in the solar system as

913  
00:34:21,750 --> 00:34:16,720

well as any potential to bring life back

914

00:34:26,950 --> 00:34:23,750

so um the planetary protection research

915

00:34:29,589 --> 00:34:26,960

program is um one of our psd rna

916

00:34:32,069 --> 00:34:29,599

programs that is all about enabling uh

917

00:34:33,990 --> 00:34:32,079

our missions to meet those planetary

918

00:34:36,310 --> 00:34:34,000

protection requirements so we're really

919

00:34:38,310 --> 00:34:36,320

interested in supporting research as

920

00:34:41,510 --> 00:34:38,320

well as technology development that is

921

00:34:44,069 --> 00:34:41,520

going to help our missions um you know

922

00:34:45,909 --> 00:34:44,079

do planetary protection um so we've

923

00:34:48,550 --> 00:34:45,919

really been working on

924

00:34:51,109 --> 00:34:48,560

getting this program uh expanded uh

925

00:34:53,750 --> 00:34:51,119

these past few years um we're trying to

926  
00:34:55,430 --> 00:34:53,760  
get more regular calls um and i really

927  
00:34:57,589 --> 00:34:55,440  
would just like to plug that you know i

928  
00:34:58,710 --> 00:34:57,599  
think a lot of you in the astrobiology

929  
00:35:00,550 --> 00:34:58,720  
community

930  
00:35:02,790 --> 00:35:00,560  
have the right skills and the right sort

931  
00:35:04,470 --> 00:35:02,800  
of mentality to apply those to some

932  
00:35:05,829 --> 00:35:04,480  
planetary protection

933  
00:35:07,270 --> 00:35:05,839  
questions and so i just want to

934  
00:35:10,150 --> 00:35:07,280  
encourage you

935  
00:35:13,349 --> 00:35:10,160  
and your colleagues to apply to the the

936  
00:35:15,349 --> 00:35:13,359  
ppr program um the non-mandatory notice

937  
00:35:18,069 --> 00:35:15,359  
of intents are due in june and the

938  
00:35:20,310 --> 00:35:18,079

proposals will be due in july

939

00:35:22,390 --> 00:35:20,320

and we are hoping that we start a more

940

00:35:24,230 --> 00:35:22,400

annual cadence um to this particular

941

00:35:27,030 --> 00:35:24,240

program so looking forward to seeing

942

00:35:29,270 --> 00:35:27,040

some of your proposals

943

00:35:36,870 --> 00:35:29,280

and with that i think i pass it back to

944

00:35:36,880 --> 00:35:46,150

you're on mute mary

945

00:35:49,750 --> 00:35:47,670

my dogs are having a bit of a scuffle

946

00:35:51,829 --> 00:35:49,760

here sorry about that yes so i'm going

947

00:35:53,510 --> 00:35:51,839

to talk about icar it's our newest

948

00:35:55,430 --> 00:35:53,520

program it's interdisciplinary

949

00:35:57,190 --> 00:35:55,440

interdisciplinary consortium for us to

950

00:35:59,670 --> 00:35:57,200

biology research

951  
00:36:00,950 --> 00:35:59,680  
it was first solicited uh three years

952  
00:36:04,150 --> 00:36:00,960  
ago

953  
00:36:06,310 --> 00:36:04,160  
it's the second solicitation and the

954  
00:36:08,550 --> 00:36:06,320  
announcement for it just came out today

955  
00:36:10,390 --> 00:36:08,560  
so um

956  
00:36:12,069 --> 00:36:10,400  
i wanted to be able to announce it at

957  
00:36:14,230 --> 00:36:12,079  
this meeting without you rushing off to

958  
00:36:16,710 --> 00:36:14,240  
start writing and we've given you i

959  
00:36:19,750 --> 00:36:16,720  
think a lot of time for prep the step

960  
00:36:21,430 --> 00:36:19,760  
ones are due september 15th of 2022.

961  
00:36:24,230 --> 00:36:21,440  
they're a little bit more involved than

962  
00:36:27,190 --> 00:36:24,240  
some of our step ones it they're about

963  
00:36:29,670 --> 00:36:27,200

five pages and they will be reviewed and

964

00:36:32,230 --> 00:36:29,680

encouraged or discouraged for submission

965

00:36:33,109 --> 00:36:32,240

of a step two which is due in january

966

00:36:38,230 --> 00:36:33,119

10th

967

00:36:41,589 --> 00:36:38,240

the selections we expect will be

968

00:36:43,829 --> 00:36:41,599

sometime in the late second quarter of

969

00:36:45,670 --> 00:36:43,839

2023 um

970

00:36:47,829 --> 00:36:45,680

uh what will be selected and with start

971

00:36:49,430 --> 00:36:47,839

dates maybe is as soon as that but we'll

972

00:36:51,510 --> 00:36:49,440

see how that goes we always have to wait

973

00:36:53,430 --> 00:36:51,520

for funding to come in but that's our

974

00:36:56,069 --> 00:36:53,440

intent the areas of research to be

975

00:36:57,829 --> 00:36:56,079

solicited this time are all five that

976

00:37:00,630 --> 00:36:57,839

are of the topics that are related to

977

00:37:02,550 --> 00:37:00,640

our rcns and for those of you that don't

978

00:37:05,190 --> 00:37:02,560

know but many of you have seen us

979

00:37:06,710 --> 00:37:05,200

present to you about how uh the rcns

980

00:37:09,270 --> 00:37:06,720

relate to the research that the

981

00:37:11,910 --> 00:37:09,280

astrobiology program funds we have an

982

00:37:13,829 --> 00:37:11,920

rcn that uh covers

983

00:37:15,589 --> 00:37:13,839

the emergence of life and prebiotic

984

00:37:17,190 --> 00:37:15,599

chemistry in early earth environments

985

00:37:19,670 --> 00:37:17,200

which is the fourth one down on this

986

00:37:21,430 --> 00:37:19,680

list we have one that now that is

987

00:37:23,430 --> 00:37:21,440

starting

988

00:37:25,510 --> 00:37:23,440

just actually had its launch today we're

989

00:37:27,589 --> 00:37:25,520

very excited about it and that's about

990

00:37:30,390 --> 00:37:27,599

primitive cells to multicellularity the

991

00:37:32,950 --> 00:37:30,400

rcn life is about the evolution of life

992

00:37:34,950 --> 00:37:32,960

we also um the other main goal of the

993

00:37:36,870 --> 00:37:34,960

astrology program is to search for life

994

00:37:40,230 --> 00:37:36,880

elsewhere and so biosignatures in life

995

00:37:43,109 --> 00:37:40,240

detection is the rcn enfold and then we

996

00:37:44,950 --> 00:37:43,119

have um two rcns that are focused on

997

00:37:49,030 --> 00:37:44,960

priority

998

00:37:50,630 --> 00:37:49,040

research areas for upcoming missions so

999

00:37:53,510 --> 00:37:50,640

lori mentioned that we are have the

1000

00:37:55,589 --> 00:37:53,520

europa clipper there's some information

1001  
00:37:58,310 --> 00:37:55,599  
um or there's some real interest in

1002  
00:38:00,870 --> 00:37:58,320  
going back to enceladus and at least

1003  
00:38:03,750 --> 00:38:00,880  
examining the plume maybe even orbiting

1004  
00:38:05,109 --> 00:38:03,760  
and landing um sending possibly another

1005  
00:38:07,190 --> 00:38:05,119  
mission back after we collect

1006  
00:38:09,190 --> 00:38:07,200  
information about europa but we're very

1007  
00:38:11,430 --> 00:38:09,200  
interested in ocean worlds

1008  
00:38:14,069 --> 00:38:11,440  
and this rcn brings together planetary

1009  
00:38:17,510 --> 00:38:14,079  
and earth scientists and then of course

1010  
00:38:19,349 --> 00:38:17,520  
um we launched uh jwst we're starting to

1011  
00:38:21,349 --> 00:38:19,359  
get data back from

1012  
00:38:23,510 --> 00:38:21,359  
from that telescope and there are great

1013  
00:38:26,150 --> 00:38:23,520

ideas that have been endorsed

1014

00:38:29,270 --> 00:38:26,160

in the astrophysics and astronomy

1015

00:38:30,790 --> 00:38:29,280

decadal survey um for outfitting a space

1016

00:38:33,430 --> 00:38:30,800

telescope that can look at the

1017

00:38:35,190 --> 00:38:33,440

atmospheres of other uh of exoplanets

1018

00:38:35,910 --> 00:38:35,200

and actually really look for earth and

1019

00:38:38,630 --> 00:38:35,920

so

1020

00:38:40,310 --> 00:38:38,640

um nexus is the rcn that has to do with

1021

00:38:42,630 --> 00:38:40,320

habitability and detection of life on

1022

00:38:44,230 --> 00:38:42,640

exoplanets so proposals that are

1023

00:38:45,990 --> 00:38:44,240

responsive to the topics that are

1024

00:38:47,109 --> 00:38:46,000

covered by that

1025

00:38:48,310 --> 00:38:47,119

are

1026  
00:38:49,589 --> 00:38:48,320  
solicited

1027  
00:38:54,630 --> 00:38:49,599  
and

1028  
00:38:56,230 --> 00:38:54,640  
community has um in these areas to

1029  
00:39:00,150 --> 00:38:56,240  
propose because as i mentioned this is a

1030  
00:39:01,670 --> 00:39:00,160  
super exciting time um and um but we

1031  
00:39:04,150 --> 00:39:01,680  
need to get ready for it we have a lot

1032  
00:39:06,870 --> 00:39:04,160  
of work to do a lot of research to do

1033  
00:39:08,950 --> 00:39:06,880  
uh next slide please

1034  
00:39:11,349 --> 00:39:08,960  
i'm only going to say a couple of things

1035  
00:39:13,829 --> 00:39:11,359  
about mission related calls that we have

1036  
00:39:16,310 --> 00:39:13,839  
so there will be a europa science call

1037  
00:39:17,910 --> 00:39:16,320  
it's going to be run as a dapper which

1038  
00:39:21,750 --> 00:39:17,920

we already talked about how the dual

1039

00:39:24,550 --> 00:39:21,760

anonymous uh reviews are um are handled

1040

00:39:27,829 --> 00:39:24,560

uh it's europa science as in science

1041

00:39:30,230 --> 00:39:27,839

that is linked directly to the research

1042

00:39:32,390 --> 00:39:30,240

goals of the europa clipper

1043

00:39:35,030 --> 00:39:32,400

mission we also have programs for

1044

00:39:38,470 --> 00:39:35,040

participating scientists and those are

1045

00:39:40,950 --> 00:39:38,480

usually programs that are run after

1046

00:39:42,870 --> 00:39:40,960

a mission has been in operation for a

1047

00:39:43,910 --> 00:39:42,880

while so keep an eye out for any of the

1048

00:39:46,790 --> 00:39:43,920

missions

1049

00:39:48,550 --> 00:39:46,800

that have been um described by lori that

1050

00:39:50,710 --> 00:39:48,560

have astrobiological

1051

00:39:52,069 --> 00:39:50,720

content and interest

1052

00:39:53,510 --> 00:39:52,079

for once they're up and going an

1053

00:39:55,670 --> 00:39:53,520

opportunity even if you weren't part of

1054

00:39:58,069 --> 00:39:55,680

the original proposing team

1055

00:40:00,470 --> 00:39:58,079

to get involved and i mentioned peace

1056

00:40:03,589 --> 00:40:00,480

star to remind you that for the moment

1057

00:40:05,430 --> 00:40:03,599

now given our funding situation that

1058

00:40:08,150 --> 00:40:05,440

pstar will only be

1059

00:40:09,670 --> 00:40:08,160

solicited every other year

1060

00:40:12,069 --> 00:40:09,680

and then to remind you that we have

1061

00:40:13,750 --> 00:40:12,079

technology calls so people you know our

1062

00:40:15,990 --> 00:40:13,760

big challenge in astrobiology is to

1063

00:40:17,270 --> 00:40:16,000

understand biosignatures but also to

1064

00:40:20,630 --> 00:40:17,280

understand

1065

00:40:23,030 --> 00:40:20,640

what kind of instrumentation and sample

1066

00:40:25,030 --> 00:40:23,040

handling and collection systems that we

1067

00:40:26,710 --> 00:40:25,040

need in order to actually

1068

00:40:29,829 --> 00:40:26,720

um

1069

00:40:32,470 --> 00:40:29,839

search for life on other targets

1070

00:40:35,270 --> 00:40:32,480

that we'll be going to so look to

1071

00:40:37,990 --> 00:40:35,280

any early ideas for picasso maturation

1072

00:40:39,670 --> 00:40:38,000

of those ideas and matisse and we have a

1073

00:40:41,589 --> 00:40:39,680

small business call

1074

00:40:43,670 --> 00:40:41,599

to get others that are typically not

1075

00:40:45,829 --> 00:40:43,680

involved in um

1076

00:40:47,670 --> 00:40:45,839

uh you know from the the small business

1077

00:40:50,069 --> 00:40:47,680

community um

1078

00:40:51,910 --> 00:40:50,079

to get involved in this as well

1079

00:40:55,030 --> 00:40:51,920

i'm gonna mention space biology i think

1080

00:40:55,910 --> 00:40:55,040

many of you know that space and physics

1081

00:40:57,750 --> 00:40:55,920

um

1082

00:41:00,069 --> 00:40:57,760

let's see biological and physical

1083

00:41:01,430 --> 00:41:00,079

sciences joined

1084

00:41:04,790 --> 00:41:01,440

smd

1085

00:41:07,270 --> 00:41:04,800

um it is a topic or an area that's

1086

00:41:09,670 --> 00:41:07,280

related to astrobiology

1087

00:41:11,349 --> 00:41:09,680

and to planetary protection

1088

00:41:14,069 --> 00:41:11,359

and we're going to post these slides and

1089

00:41:17,510 --> 00:41:14,079

at the end of the slides um those of us

1090

00:41:19,670 --> 00:41:17,520

that that manage the programs in those

1091

00:41:21,349 --> 00:41:19,680

in those divisions and in those

1092

00:41:23,990 --> 00:41:21,359

and in the specific research programs

1093

00:41:25,670 --> 00:41:24,000

came up with a a nice matrix that sort

1094

00:41:27,510 --> 00:41:25,680

of shows the difference so that when

1095

00:41:29,829 --> 00:41:27,520

you're looking to figure out where your

1096

00:41:31,430 --> 00:41:29,839

research fits we don't want you coming

1097

00:41:33,270 --> 00:41:31,440

to us with something that belongs in

1098

00:41:35,510 --> 00:41:33,280

planetary protection i shouldn't say us

1099

00:41:36,710 --> 00:41:35,520

applying for protection if it belongs in

1100

00:41:38,630 --> 00:41:36,720

exo

1101

00:41:40,550 --> 00:41:38,640

or planetary protection if it belongs in

1102

00:41:42,630 --> 00:41:40,560

space biology so really pay attention to

1103

00:41:44,790 --> 00:41:42,640

those things we are trying to find a

1104

00:41:46,950 --> 00:41:44,800

home for everybody's research now i'm

1105

00:41:49,109 --> 00:41:46,960

going to turn this over to two

1106

00:41:52,950 --> 00:41:49,119

opportunities for early career folks and

1107

00:41:52,960 --> 00:41:55,430

oops

1108

00:41:59,510 --> 00:41:57,349

let's see there we go was having a

1109

00:42:01,750 --> 00:41:59,520

problem thanks mary

1110

00:42:03,510 --> 00:42:01,760

as mary mentioned we have two programs

1111

00:42:04,630 --> 00:42:03,520

uh these are for earlier career folks

1112

00:42:06,630 --> 00:42:04,640

and the important thing here is that

1113

00:42:08,710 --> 00:42:06,640

they sort of reach um they sort of

1114

00:42:10,790 --> 00:42:08,720

across uh different research programs in

1115

00:42:14,950 --> 00:42:10,800

the planetary science division uh the

1116

00:42:17,109 --> 00:42:14,960

first of course is uh c118 or c18 rather

1117

00:42:19,589 --> 00:42:17,119

which is the early career award

1118

00:42:22,470 --> 00:42:19,599

this one for roses 22 the proposals are

1119

00:42:24,470 --> 00:42:22,480

due in december and the point of the

1120

00:42:25,750 --> 00:42:24,480

early career award is to fund

1121

00:42:27,270 --> 00:42:25,760

support research professional

1122

00:42:29,190 --> 00:42:27,280

development and community involvement of

1123

00:42:31,910 --> 00:42:29,200

outstanding early career scientists so

1124

00:42:33,670 --> 00:42:31,920

this is really to fund individuals um

1125

00:42:35,589 --> 00:42:33,680

the eligibility requirements you can see

1126

00:42:37,750 --> 00:42:35,599

them in the call but briefly you have to

1127

00:42:41,510 --> 00:42:37,760

be the pi koai or science pi of a

1128

00:42:43,910 --> 00:42:41,520

relevant program roses 19 or roses 21

1129

00:42:45,510 --> 00:42:43,920

award so it's a an award in one of the

1130

00:42:47,990 --> 00:42:45,520

relevant programs that was selected in

1131

00:42:50,309 --> 00:42:48,000

either of those roses years and you must

1132

00:42:53,510 --> 00:42:50,319

have your terminal degree of january 1st

1133

00:42:55,109 --> 00:42:53,520

2020 2011 or later um and then there's a

1134

00:42:56,470 --> 00:42:55,119

couple other things again you can see

1135

00:42:59,190 --> 00:42:56,480

these in the call

1136

00:43:01,510 --> 00:42:59,200

but briefly it is up to five years uh

1137

00:43:03,589 --> 00:43:01,520

total uh for the award for the proposal

1138

00:43:05,030 --> 00:43:03,599

you have um and no more than two hundred

1139

00:43:05,990 --> 00:43:05,040

thousand total

1140

00:43:08,069 --> 00:43:06,000

um

1141

00:43:09,670 --> 00:43:08,079

the other program is for graduate

1142

00:43:11,589 --> 00:43:09,680

students this is the future

1143

00:43:14,309 --> 00:43:11,599

investigators in earth and space science

1144

00:43:16,390 --> 00:43:14,319

and technology or finest uh proposals

1145

00:43:19,589 --> 00:43:16,400

there are due annually in sort of early

1146

00:43:21,670 --> 00:43:19,599

to mid february uh the roses 21 uh

1147

00:43:23,589 --> 00:43:21,680

finest proposals were actually due in

1148

00:43:26,309 --> 00:43:23,599

february on february 11th i believe it

1149

00:43:28,470 --> 00:43:26,319

was uh so this year uh so you should be

1150

00:43:30,230 --> 00:43:28,480

looking for roses 22. that those dates

1151  
00:43:31,510 --> 00:43:30,240  
will be announced uh probably towards

1152  
00:43:33,109 --> 00:43:31,520  
the end of this calendar year but you

1153  
00:43:34,550 --> 00:43:33,119  
can expect they'll be in sort of early

1154  
00:43:36,870 --> 00:43:34,560  
to mid february

1155  
00:43:39,829 --> 00:43:36,880  
finest is not a fellowship finance is

1156  
00:43:41,750 --> 00:43:39,839  
actually a grant um for this pro for

1157  
00:43:43,670 --> 00:43:41,760  
proposals here you must be a graduate

1158  
00:43:46,150 --> 00:43:43,680  
student either applied admitted or

1159  
00:43:48,790 --> 00:43:46,160  
enrolled um at the time of the proposal

1160  
00:43:51,030 --> 00:43:48,800  
to an accredited us university and you

1161  
00:43:53,589 --> 00:43:51,040  
must not have been previously awarded a

1162  
00:43:55,910 --> 00:43:53,599  
finest or the previous award program

1163  
00:43:58,230 --> 00:43:55,920

nasa for more than 36 months

1164

00:44:01,190 --> 00:43:58,240

finest are for up to three years and no

1165

00:44:03,910 --> 00:44:01,200

more than 50k per year um and it's

1166

00:44:06,790 --> 00:44:03,920

important to note uh the call was kind

1167

00:44:09,589 --> 00:44:06,800

of really reworked in roses 21 which was

1168

00:44:11,349 --> 00:44:09,599

mostly a reorganization for clarity and

1169

00:44:13,829 --> 00:44:11,359

there wasn't really a change in scope

1170

00:44:15,750 --> 00:44:13,839

very much but um hopefully uh when you

1171

00:44:18,230 --> 00:44:15,760

look at it for roses 22 or when you

1172

00:44:20,630 --> 00:44:18,240

applied for roses 21 you found it a lot

1173

00:44:22,309 --> 00:44:20,640

easier to navigate through and the thing

1174

00:44:24,950 --> 00:44:22,319

to note here these are evaluated for

1175

00:44:26,950 --> 00:44:24,960

merit relevance and research readiness

1176

00:44:29,109 --> 00:44:26,960

research readiness is a relatively new

1177

00:44:31,109 --> 00:44:29,119

criteria it really reflects that these

1178

00:44:32,790 --> 00:44:31,119

are grants they're awarded to research

1179

00:44:34,550 --> 00:44:32,800

and not fellowships which are awarded to

1180

00:44:36,069 --> 00:44:34,560

individuals and this is really to

1181

00:44:38,069 --> 00:44:36,079

account for the difference here in how

1182

00:44:40,150 --> 00:44:38,079

we review other programs which evaluate

1183

00:44:41,349 --> 00:44:40,160

qualifications of the team we understand

1184

00:44:42,870 --> 00:44:41,359

that graduate students may not

1185

00:44:44,470 --> 00:44:42,880

necessarily have all of the

1186

00:44:46,309 --> 00:44:44,480

qualifications to do the research when

1187

00:44:47,829 --> 00:44:46,319

they propose but research readiness

1188

00:44:49,670 --> 00:44:47,839

allows them to say i'll be taking this

1189

00:44:51,589 --> 00:44:49,680

course in year two or whatever that will

1190

00:44:53,750 --> 00:44:51,599

help me do that research so that's the

1191

00:44:56,230 --> 00:44:53,760

early career award and finest and i will

1192

00:44:57,910 --> 00:44:56,240

be passing it next back to mary to tell

1193

00:45:03,349 --> 00:44:57,920

us a little bit about astrobiology

1194

00:45:07,109 --> 00:45:05,030

so we wanted to take this opportunity

1195

00:45:10,069 --> 00:45:07,119

not only to talk about funding but to

1196

00:45:12,390 --> 00:45:10,079

remind you of other ways that

1197

00:45:14,230 --> 00:45:12,400

are important not only to us but i think

1198

00:45:16,230 --> 00:45:14,240

important for

1199

00:45:18,309 --> 00:45:16,240

your own careers in research and getting

1200

00:45:21,750 --> 00:45:18,319

involved in nasa for ways to get

1201

00:45:23,670 --> 00:45:21,760

information um that is presented that

1202

00:45:26,150 --> 00:45:23,680

that's available for you to see sort of

1203

00:45:28,390 --> 00:45:26,160

how things evolve before they get sprung

1204

00:45:30,309 --> 00:45:28,400

on you uh and also ways for you to get

1205

00:45:33,030 --> 00:45:30,319

your ideas out there so that we can hear

1206

00:45:34,790 --> 00:45:33,040

what you're interested in as as well and

1207

00:45:35,750 --> 00:45:34,800

so we have a list of things that we came

1208

00:45:37,990 --> 00:45:35,760

up with

1209

00:45:39,589 --> 00:45:38,000

um one of them is to remind you guys

1210

00:45:42,069 --> 00:45:39,599

that there's a space studies board

1211

00:45:43,430 --> 00:45:42,079

committee on astrobiology and planetary

1212

00:45:45,270 --> 00:45:43,440

science

1213

00:45:47,349 --> 00:45:45,280

this is a caps meeting they meet at

1214

00:45:50,550 --> 00:45:47,359

least twice a year sometimes they've met

1215

00:45:52,950 --> 00:45:50,560

more frequently with special topics um

1216

00:45:54,390 --> 00:45:52,960

you know you should sign up because they

1217

00:45:56,069 --> 00:45:54,400

they seem like they're kind of secretive

1218

00:45:57,750 --> 00:45:56,079

they kind of spring us on us every once

1219

00:46:00,309 --> 00:45:57,760

in a while when we're not quite

1220

00:46:01,750 --> 00:46:00,319

expecting but if you sign up to the um

1221

00:46:04,069 --> 00:46:01,760

the mailing list they'll let you know

1222

00:46:06,150 --> 00:46:04,079

when it is and you can listen in and by

1223

00:46:07,910 --> 00:46:06,160

all means if the national academy comes

1224

00:46:09,910 --> 00:46:07,920

to you and asks you to serve as a

1225

00:46:12,069 --> 00:46:09,920

representative of the astrobiology

1226  
00:46:13,109 --> 00:46:12,079  
community please say yes this is a

1227  
00:46:15,750 --> 00:46:13,119  
really

1228  
00:46:17,589 --> 00:46:15,760  
important committee for us um

1229  
00:46:20,790 --> 00:46:17,599  
to interact with and to get a

1230  
00:46:22,550 --> 00:46:20,800  
representation from astrobiology on it

1231  
00:46:25,190 --> 00:46:22,560  
there's also the planetary sciences

1232  
00:46:27,190 --> 00:46:25,200  
division advisory committee um the way

1233  
00:46:28,870 --> 00:46:27,200  
we handle that is you nominate yourself

1234  
00:46:30,550 --> 00:46:28,880  
we have a call

1235  
00:46:32,710 --> 00:46:30,560  
pretty much every year because we have

1236  
00:46:34,309 --> 00:46:32,720  
people rotating on and off

1237  
00:46:36,790 --> 00:46:34,319  
um and

1238  
00:46:38,470 --> 00:46:36,800

this is again a uh one

1239

00:46:39,990 --> 00:46:38,480

an advisory committee that meets a

1240

00:46:42,950 --> 00:46:40,000

couple times a year

1241

00:46:45,109 --> 00:46:42,960

you interact more closely with um

1242

00:46:46,710 --> 00:46:45,119

with of course laurie and stephen

1243

00:46:47,829 --> 00:46:46,720

reinhardt who's the head of the rna

1244

00:46:50,230 --> 00:46:47,839

program

1245

00:46:52,630 --> 00:46:50,240

uh it's an opportunity to interact with

1246

00:46:55,589 --> 00:46:52,640

the leads on missions and mission you

1247

00:46:57,670 --> 00:46:55,599

know mission lines um it's a really um

1248

00:46:59,510 --> 00:46:57,680

of course those are also uh have a

1249

00:47:01,349 --> 00:46:59,520

public component to it you can listen in

1250

00:47:02,710 --> 00:47:01,359

on those but nominate yourself and get

1251  
00:47:07,270 --> 00:47:02,720  
involved

1252  
00:47:10,150 --> 00:47:07,280  
there's also the ads so there is um

1253  
00:47:12,470 --> 00:47:10,160  
an assessment group for for mars

1254  
00:47:16,069 --> 00:47:12,480  
exploration for outer planets for small

1255  
00:47:18,710 --> 00:47:16,079  
bodies and for exoplanets and this is um

1256  
00:47:20,390 --> 00:47:18,720  
again a great place to hear what your

1257  
00:47:22,710 --> 00:47:20,400  
colleagues are working on find out what

1258  
00:47:24,790 --> 00:47:22,720  
other people in your area are doing what

1259  
00:47:26,549 --> 00:47:24,800  
ideas are out there for missions and big

1260  
00:47:27,670 --> 00:47:26,559  
science questions to these various

1261  
00:47:29,030 --> 00:47:27,680  
bodies

1262  
00:47:31,430 --> 00:47:29,040  
um

1263  
00:47:33,829 --> 00:47:31,440

and there's an opportunity again to get

1264

00:47:35,750 --> 00:47:33,839

involved yourself um one of the things

1265

00:47:37,030 --> 00:47:35,760

that our rcn

1266

00:47:38,790 --> 00:47:37,040

steering committee members have been

1267

00:47:41,430 --> 00:47:38,800

doing is attending these meetings more

1268

00:47:43,910 --> 00:47:41,440

and more to make sure that rather than

1269

00:47:46,309 --> 00:47:43,920

have astrobiology as an afterthought or

1270

00:47:49,030 --> 00:47:46,319

a tangential you're actually involved in

1271

00:47:51,270 --> 00:47:49,040

these ideas as as they get formulated

1272

00:47:52,549 --> 00:47:51,280

and then presented to

1273

00:47:55,030 --> 00:47:52,559

our leadership

1274

00:47:58,150 --> 00:47:55,040

um or to the rest of the community

1275

00:47:59,829 --> 00:47:58,160

um we have the rcns uh affiliate uh

1276

00:48:01,990 --> 00:47:59,839

memberships if you aren't actually a

1277

00:48:03,750 --> 00:48:02,000

steering committee just want to remind

1278

00:48:05,829 --> 00:48:03,760

you that the steering committee we have

1279

00:48:07,190 --> 00:48:05,839

leads for each of these we have and

1280

00:48:09,349 --> 00:48:07,200

we're going to go through that and i

1281

00:48:10,549 --> 00:48:09,359

think i'll do that now if that's okay

1282

00:48:12,309 --> 00:48:10,559

let's go through the

1283

00:48:16,230 --> 00:48:12,319

the rcns lindsey and then i can come

1284

00:48:21,109 --> 00:48:18,710

so i'm starting with the very first one

1285

00:48:23,510 --> 00:48:21,119

that we ever stood up we have the nexus

1286

00:48:26,309 --> 00:48:23,520

for exoplanet system science

1287

00:48:27,750 --> 00:48:26,319

uh below at the bottom you can see the

1288

00:48:30,390 --> 00:48:27,760

uh the leads

1289

00:48:34,549 --> 00:48:30,400

as long as you have a

1290

00:48:36,390 --> 00:48:34,559

a funded proposal with nasa um you're

1291

00:48:37,510 --> 00:48:36,400

considered a member of the steering

1292

00:48:40,549 --> 00:48:37,520

committee

1293

00:48:43,910 --> 00:48:40,559

um and and you helped shape the

1294

00:48:46,150 --> 00:48:43,920

activities of this rcn and then they

1295

00:48:48,150 --> 00:48:46,160

have a an enormous list of affiliate

1296

00:48:51,270 --> 00:48:48,160

members and that's how we engage our

1297

00:48:53,670 --> 00:48:51,280

international partners uh and any other

1298

00:48:55,589 --> 00:48:53,680

uh individuals that don't necessarily

1299

00:48:58,069 --> 00:48:55,599

have funding for nasa but might have

1300

00:48:58,950 --> 00:48:58,079

funding for nsf uh to be involved in

1301

00:49:00,309 --> 00:48:58,960

this

1302

00:49:02,950 --> 00:49:00,319

um

1303

00:49:04,630 --> 00:49:02,960

it's really important okay i guess we're

1304

00:49:06,870 --> 00:49:04,640

going on that's fine we can we can go to

1305

00:49:08,630 --> 00:49:06,880

the next one move me along that's great

1306

00:49:10,069 --> 00:49:08,640

then we have the network for life

1307

00:49:11,430 --> 00:49:10,079

detection and i should have called out

1308

00:49:12,950 --> 00:49:11,440

everybody's name on the last one so

1309

00:49:14,790 --> 00:49:12,960

heather graham is a colleague tori

1310

00:49:16,710 --> 00:49:14,800

holler and brittany schmidt

1311

00:49:18,309 --> 00:49:16,720

um this is about advancing the science

1312

00:49:20,230 --> 00:49:18,319

and technology that is going to be

1313

00:49:22,230 --> 00:49:20,240

required for the search for evidence of

1314

00:49:25,349 --> 00:49:22,240

life beyond earth i mentioned this is

1315

00:49:27,270 --> 00:49:25,359

that search for life rcn that we have

1316

00:49:30,470 --> 00:49:27,280

uh and both you know didn't mention

1317

00:49:32,230 --> 00:49:30,480

before but but um all of the rcns

1318

00:49:34,230 --> 00:49:32,240

have coordinated workshops and what not

1319

00:49:35,750 --> 00:49:34,240

to to engage the community that is one

1320

00:49:39,430 --> 00:49:35,760

of their goals

1321

00:49:43,349 --> 00:49:41,829

we have pce3 prebiotic chemistry and

1322

00:49:45,109 --> 00:49:43,359

early earth environments with karen

1323

00:49:47,589 --> 00:49:45,119

rodgers lauren williams who i know are

1324

00:49:49,750 --> 00:49:47,599

at the meeting i think tim lyons flew in

1325

00:49:51,030 --> 00:49:49,760

today and unfortunately rahm isn't there

1326

00:49:53,430 --> 00:49:51,040

in person

1327

00:49:55,829 --> 00:49:53,440

but he is one of our cardboard cutouts

1328

00:49:57,430 --> 00:49:55,839

so go have your picture taken with him

1329

00:49:59,030 --> 00:49:57,440

um and i actually would love it if you

1330

00:50:00,870 --> 00:49:59,040

would all go around getting your picture

1331

00:50:02,950 --> 00:50:00,880

take doing selfies with these and then

1332

00:50:05,030 --> 00:50:02,960

send them to us at the program or me

1333

00:50:07,190 --> 00:50:05,040

personally um it would be really fun to

1334

00:50:09,750 --> 00:50:07,200

see all of you there so this is about

1335

00:50:11,190 --> 00:50:09,760

the earliest planetary formation the

1336

00:50:13,510 --> 00:50:11,200

evolution of the near surface

1337

00:50:15,030 --> 00:50:13,520

inventories and geological settings and

1338

00:50:18,549 --> 00:50:15,040

building blocks that were available for

1339

00:50:20,630 --> 00:50:18,559

prebiotic complexity to emerge and

1340

00:50:22,950 --> 00:50:20,640

basically uh peering into the paths with

1341

00:50:24,870 --> 00:50:22,960

today's biochemistry

1342

00:50:27,190 --> 00:50:24,880

in all of these you can see that there

1343

00:50:31,750 --> 00:50:27,200

are overlaps between other programs at

1344

00:50:33,430 --> 00:50:31,760

nasa this particular program um is is

1345

00:50:35,910 --> 00:50:33,440

also includes people from our emerging

1346

00:50:37,829 --> 00:50:35,920

worlds in planetary sciences and we also

1347

00:50:43,670 --> 00:50:37,839

work with people at nsf in this

1348

00:50:46,309 --> 00:50:45,190

then there's the network for ocean

1349

00:50:47,109 --> 00:50:46,319

worlds

1350

00:50:49,270 --> 00:50:47,119

um

1351  
00:50:52,630 --> 00:50:49,280  
so the names aren't on there but allison

1352  
00:50:54,069 --> 00:50:52,640  
is in the top kevin orrigo is just below

1353  
00:50:56,230 --> 00:50:54,079  
her and then there's alyssa rhoden and

1354  
00:50:58,390 --> 00:50:56,240  
chris german and i think i believe

1355  
00:51:00,710 --> 00:50:58,400  
alyssa and um

1356  
00:51:03,190 --> 00:51:00,720  
and no sorry i think uh

1357  
00:51:05,190 --> 00:51:03,200  
chris and allison are there so this is

1358  
00:51:08,150 --> 00:51:05,200  
about looking at the physical processes

1359  
00:51:11,670 --> 00:51:08,160  
by geochemical cycles

1360  
00:51:14,950 --> 00:51:11,680  
exploring earth analogs to understand

1361  
00:51:16,790 --> 00:51:14,960  
properties and processes and technology

1362  
00:51:19,270 --> 00:51:16,800  
development

1363  
00:51:23,190 --> 00:51:19,280

make sure you look forward to an ocean

1364

00:51:25,109 --> 00:51:23,200

world analog coming to you october 28 22

1365

00:51:28,309 --> 00:51:25,119

uh sometime probably around the 13th to

1366

00:51:30,630 --> 00:51:28,319

the 15th in denver

1367

00:51:33,430 --> 00:51:30,640

next

1368

00:51:35,670 --> 00:51:33,440

and then ta-da this is our last

1369

00:51:37,750 --> 00:51:35,680

one we've had several slides coming soon

1370

00:51:39,150 --> 00:51:37,760

and now it has arrived

1371

00:51:41,430 --> 00:51:39,160

life from early cells to

1372

00:51:44,470 --> 00:51:41,440

multicellularity the fifth of our five

1373

00:51:48,309 --> 00:51:44,480

rcns with ariel ambar batul

1374

00:51:50,309 --> 00:51:48,319

kashar frank rosensweig and mary drozier

1375

00:51:52,150 --> 00:51:50,319

you'll see them bopping around the

1376

00:51:54,390 --> 00:51:52,160

meeting i think actually ariel isn't

1377

00:51:57,109 --> 00:51:54,400

here but he was uh had a coffee break

1378

00:52:00,230 --> 00:51:57,119

with you guys this morning um

1379

00:52:01,829 --> 00:52:00,240

if we can't understand what life um has

1380

00:52:03,270 --> 00:52:01,839

emerged and what it looks like how are

1381

00:52:04,470 --> 00:52:03,280

we gonna be able to find it anywhere

1382

00:52:06,710 --> 00:52:04,480

else so they're going to be looking at

1383

00:52:08,630 --> 00:52:06,720

the establishment of first cells the

1384

00:52:10,470 --> 00:52:08,640

rise of the last universal common

1385

00:52:13,030 --> 00:52:10,480

ancestor

1386

00:52:14,790 --> 00:52:13,040

life's expansion into planetary to a

1387

00:52:16,950 --> 00:52:14,800

planetary scale

1388

00:52:18,470 --> 00:52:16,960

because it is one on earth and

1389

00:52:21,030 --> 00:52:18,480

compartmentalization

1390

00:52:23,109 --> 00:52:21,040

rise of multicellularity and cellular

1391

00:52:25,030 --> 00:52:23,119

differentiation and again this is to

1392

00:52:27,670 --> 00:52:25,040

understand how

1393

00:52:30,069 --> 00:52:27,680

life can take over a planet um so if we

1394

00:52:31,670 --> 00:52:30,079

can that's the end for rcns if we can go

1395

00:52:35,109 --> 00:52:31,680

back and i'll just finish up a couple of

1396

00:52:35,119 --> 00:52:39,990

sorry to bounce around for you

1397

00:52:45,109 --> 00:52:41,589

oh there we go

1398

00:52:47,990 --> 00:52:45,119

all right um all of these organizations

1399

00:52:51,190 --> 00:52:48,000

hold workshops that we support please

1400

00:52:52,390 --> 00:52:51,200

get engaged intend we've made them i

1401

00:52:53,829 --> 00:52:52,400

don't know what we're going to do we can

1402

00:52:56,150 --> 00:52:53,839

actually travel because doing them

1403

00:52:58,470 --> 00:52:56,160

virtually has worked so well we have

1404

00:53:00,950 --> 00:52:58,480

those that are you know have many levels

1405

00:53:02,470 --> 00:53:00,960

of participation so that we can really

1406

00:53:05,349 --> 00:53:02,480

um get the

1407

00:53:08,309 --> 00:53:05,359

the the most from um from our meeting

1408

00:53:10,390 --> 00:53:08,319

time and the most people involved

1409

00:53:12,790 --> 00:53:10,400

we have workshops where the emphasis is

1410

00:53:14,549 --> 00:53:12,800

on work so this isn't a collection of

1411

00:53:16,390 --> 00:53:14,559

presentations but

1412

00:53:18,150 --> 00:53:16,400

um with all of them what comes out of

1413

00:53:20,230 --> 00:53:18,160

there is some kind of report with some

1414

00:53:21,829 --> 00:53:20,240

findings and observations about the

1415

00:53:25,430 --> 00:53:21,839

state of the research

1416

00:53:27,190 --> 00:53:25,440

or um the state of the uh of our efforts

1417

00:53:29,109 --> 00:53:27,200

to look for

1418

00:53:30,790 --> 00:53:29,119

life i also just want to make you aware

1419

00:53:32,630 --> 00:53:30,800

that the space studies board also has a

1420

00:53:35,109 --> 00:53:32,640

planetary protection

1421

00:53:37,589 --> 00:53:35,119

committee and that's another place that

1422

00:53:39,670 --> 00:53:37,599

certainly if they ask please serve and

1423

00:53:40,950 --> 00:53:39,680

listen in on what they're doing because

1424

00:53:42,950 --> 00:53:40,960

without

1425

00:53:44,870 --> 00:53:42,960

planetary protection and we're kind of

1426  
00:53:47,829 --> 00:53:44,880  
lost and looking for space for life

1427  
00:53:49,190 --> 00:53:47,839  
anywhere else on uh beyond earth

1428  
00:53:51,910 --> 00:53:49,200  
so we're gonna have a couple of people

1429  
00:53:53,349 --> 00:53:51,920  
introduce themselves and talk about uh

1430  
00:53:54,870 --> 00:53:53,359  
various things and so the next person

1431  
00:54:01,030 --> 00:53:54,880  
that's gonna talk is melissa curve and

1432  
00:54:05,190 --> 00:54:04,069  
hello everybody so um today there this

1433  
00:54:07,510 --> 00:54:05,200  
today there have been a number of

1434  
00:54:09,990 --> 00:54:07,520  
sessions about early astro

1435  
00:54:11,910 --> 00:54:10,000  
program early career opportunities and

1436  
00:54:13,190 --> 00:54:11,920  
other early career

1437  
00:54:14,069 --> 00:54:13,200  
programs

1438  
00:54:24,790 --> 00:54:14,079

the

1439

00:54:27,349 --> 00:54:24,800

nasa astrobiology program that provides

1440

00:54:29,190 --> 00:54:27,359

travel awards of up to five thousand

1441

00:54:31,349 --> 00:54:29,200

dollars for

1442

00:54:33,510 --> 00:54:31,359

um for research in

1443

00:54:35,190 --> 00:54:33,520

many parts of the world so we have a

1444

00:54:37,349 --> 00:54:35,200

cool map that shows places that

1445

00:54:39,750 --> 00:54:37,359

researchers have gone in in the past so

1446

00:54:42,230 --> 00:54:39,760

this is open to undergraduates and

1447

00:54:43,990 --> 00:54:42,240

graduate students and

1448

00:54:46,710 --> 00:54:44,000

you can find that if you go to

1449

00:54:48,549 --> 00:54:46,720

[astrobiology.nasa.gov](http://astrobiology.nasa.gov)

1450

00:54:50,829 --> 00:54:48,559

and go to funding and scroll all the way

1451  
00:54:52,870 --> 00:54:50,839  
to the bottom and there are

1452  
00:54:54,870 --> 00:54:52,880  
astrobiology specific

1453  
00:54:56,309 --> 00:54:54,880  
early career opportunities

1454  
00:54:59,030 --> 00:54:56,319  
similar to that there is the

1455  
00:55:00,789 --> 00:54:59,040  
astrobiology graduate conference and the

1456  
00:55:03,589 --> 00:55:00,799  
organizers some of the organizers for

1457  
00:55:06,230 --> 00:55:03,599  
the 2022 conference are here today

1458  
00:55:09,829 --> 00:55:06,240  
the conference is scheduled for early

1459  
00:55:11,510 --> 00:55:09,839  
august it'll be virtual and the

1460  
00:55:13,670 --> 00:55:11,520  
applications are being accepted for

1461  
00:55:17,430 --> 00:55:13,680  
about another 10 days so you can get

1462  
00:55:21,030 --> 00:55:19,030  
there's an international summer school

1463  
00:55:23,910 --> 00:55:21,040

and that's another partnership with our

1464

00:55:26,309 --> 00:55:23,920

with a spanish um astrobiology group the

1465

00:55:28,390 --> 00:55:26,319

centro de austrobiologia and i think

1466

00:55:30,150 --> 00:55:28,400

that both directors of the international

1467

00:55:33,910 --> 00:55:30,160

summer school and astrobiology are here

1468

00:55:35,589 --> 00:55:33,920

this week so rosalia lopez for the u.s

1469

00:55:38,069 --> 00:55:35,599

portion so it's about 20 students from

1470

00:55:39,589 --> 00:55:38,079

the u.s and 20 students from europe and

1471

00:55:41,030 --> 00:55:39,599

i believe that victor paro is here

1472

00:55:43,109 --> 00:55:41,040

somewhere

1473

00:55:45,190 --> 00:55:43,119

and that's scheduled for the very end of

1474

00:55:46,870 --> 00:55:45,200

july for a week

1475

00:55:48,789 --> 00:55:46,880

there are early career collaboration

1476  
00:55:50,549 --> 00:55:48,799  
awards not to be confused with the other

1477  
00:55:53,430 --> 00:55:50,559  
early career awards

1478  
00:55:55,349 --> 00:55:53,440  
and this is an opportunity for

1479  
00:55:57,990 --> 00:55:55,359  
for undergraduates graduate students

1480  
00:55:59,190 --> 00:55:58,000  
postdocs to travel

1481  
00:56:02,549 --> 00:55:59,200  
to a

1482  
00:56:03,589 --> 00:56:02,559  
location either an astrobiology program

1483  
00:56:06,789 --> 00:56:03,599  
funded

1484  
00:56:08,950 --> 00:56:06,799  
researcher but to work with somebody

1485  
00:56:10,309 --> 00:56:08,960  
that is beneficial to their research so

1486  
00:56:12,630 --> 00:56:10,319  
it can be

1487  
00:56:16,710 --> 00:56:12,640  
to learn how to use a new instrument it

1488  
00:56:18,309 --> 00:56:16,720

can be to test their samples on

1489

00:56:20,789 --> 00:56:18,319

equipment that they don't have in their

1490

00:56:22,470 --> 00:56:20,799

lab it can be to go to a telescope

1491

00:56:24,470 --> 00:56:22,480

so all of this information is where is

1492

00:56:26,549 --> 00:56:24,480

available on the astrobiology program

1493

00:56:29,910 --> 00:56:26,559

website and

1494

00:56:31,910 --> 00:56:29,920

the last is nasa postdoctoral program

1495

00:56:33,910 --> 00:56:31,920

the folks from oak ridge associated

1496

00:56:35,990 --> 00:56:33,920

universities will be here by tomorrow

1497

00:56:39,109 --> 00:56:36,000

and they'll be here for a few days

1498

00:56:41,270 --> 00:56:39,119

the astrobiology program supports 15 you

1499

00:56:43,030 --> 00:56:41,280

typically 15

1500

00:56:47,109 --> 00:56:43,040

post-doctoral fellows for up to two

1501  
00:56:48,950 --> 00:56:47,119  
years for astrobiology program funded

1502  
00:56:51,109 --> 00:56:48,960  
researchers and

1503  
00:56:53,270 --> 00:56:51,119  
there are quite a few npps who are here

1504  
00:56:55,109 --> 00:56:53,280  
and presenting this week

1505  
00:56:57,910 --> 00:56:55,119  
one last thing i want to bring up is we

1506  
00:57:00,470 --> 00:56:57,920  
have a daya team diversity

1507  
00:57:03,589 --> 00:57:00,480  
equity inclusion and accessibility team

1508  
00:57:05,670 --> 00:57:03,599  
so the members are myself daniella

1509  
00:57:07,510 --> 00:57:05,680  
scalise was also the education and

1510  
00:57:10,069 --> 00:57:07,520  
communication lead but she couldn't be

1511  
00:57:11,589 --> 00:57:10,079  
here this week aaron granstall who has

1512  
00:57:14,789 --> 00:57:11,599  
been signing the graphic novels

1513  
00:57:16,150 --> 00:57:14,799

downstairs and dr benita bell

1514

00:57:19,270 --> 00:57:16,160

who has been

1515

00:57:22,390 --> 00:57:19,280

our our conduit to the to minority

1516

00:57:25,589 --> 00:57:22,400

serving institutions and hbcus

1517

00:57:27,990 --> 00:57:25,599

so we have if you look back you can you

1518

00:57:30,470 --> 00:57:28,000

may have seen last year a letter to the

1519

00:57:33,829 --> 00:57:30,480

community we've been involved in the

1520

00:57:35,430 --> 00:57:33,839

issues about the about fieldwork

1521

00:57:39,430 --> 00:57:35,440

policies

1522

00:57:42,230 --> 00:57:39,440

we have presented to the decadal group

1523

00:57:43,510 --> 00:57:42,240

on the state of the profession

1524

00:57:45,510 --> 00:57:43,520

and if anybody would like to get

1525

00:57:48,630 --> 00:57:45,520

involved please let us know so my email

1526

00:57:50,470 --> 00:57:48,640

address is melissa.kervin at nasa.gov if

1527

00:57:52,069 --> 00:57:50,480

you'd like to get involved in any data

1528

00:57:54,870 --> 00:57:52,079

issues please let us know and we love

1529

00:58:00,390 --> 00:57:54,880

your input so i think that's about it so

1530

00:58:05,190 --> 00:58:02,230

okay we just have a couple more slides

1531

00:58:06,789 --> 00:58:05,200

and and um so i'll go through those

1532

00:58:08,549 --> 00:58:06,799

well we wanted to make sure that you got

1533

00:58:10,549 --> 00:58:08,559

to see everybody um we mentioned

1534

00:58:12,390 --> 00:58:10,559

daniella scalise who unfortunately can't

1535

00:58:14,309 --> 00:58:12,400

uh isn't joining us she leads our

1536

00:58:16,230 --> 00:58:14,319

communication team

1537

00:58:18,390 --> 00:58:16,240

and one of the most and also our

1538

00:58:20,470 --> 00:58:18,400

education lead as well

1539

00:58:23,109 --> 00:58:20,480

uh one of the most important things that

1540

00:58:25,030 --> 00:58:23,119

she does is the

1541

00:58:27,829 --> 00:58:25,040

science communication guild and if i can

1542

00:58:30,390 --> 00:58:27,839

have that slide very very quickly

1543

00:58:32,309 --> 00:58:30,400

many of you remember that we used to do

1544

00:58:33,109 --> 00:58:32,319

fame lab usa

1545

00:58:35,430 --> 00:58:33,119

um

1546

00:58:37,190 --> 00:58:35,440

we had i think actually the last time we

1547

00:58:40,390 --> 00:58:37,200

were at georgia tech we actually had

1548

00:58:42,069 --> 00:58:40,400

michelle nichols here to host uh the

1549

00:58:46,470 --> 00:58:42,079

fame lab finals

1550

00:58:48,870 --> 00:58:46,480

uh it ended up um spurring a lot of and

1551  
00:58:51,589 --> 00:58:48,880  
inspiring a lot of different science

1552  
00:58:53,270 --> 00:58:51,599  
uh communication initiatives

1553  
00:58:55,589 --> 00:58:53,280  
i have there's a list down here of the

1554  
00:58:58,710 --> 00:58:55,599  
explainable science talks space in your

1555  
00:59:01,910 --> 00:58:58,720  
face and all of those are activities

1556  
00:59:03,430 --> 00:59:01,920  
either trainings workshops

1557  
00:59:06,230 --> 00:59:03,440  
and

1558  
00:59:09,030 --> 00:59:06,240  
science uh communication opportunities

1559  
00:59:11,510 --> 00:59:09,040  
that are hosted by some of our trainees

1560  
00:59:13,670 --> 00:59:11,520  
uh from fame lab so the communications

1561  
00:59:15,430 --> 00:59:13,680  
guild is the next step from that we have

1562  
00:59:18,069 --> 00:59:15,440  
organized or

1563  
00:59:20,069 --> 00:59:18,079

should say daniela has organized

1564

00:59:22,150 --> 00:59:20,079

all of the people that are interested in

1565

00:59:24,390 --> 00:59:22,160

communicating whatever your medium is

1566

00:59:27,030 --> 00:59:24,400

and connecting it to the sac and the

1567

00:59:29,670 --> 00:59:27,040

science communication opportunities

1568

00:59:32,549 --> 00:59:29,680

that we have at nasa so

1569

00:59:35,030 --> 00:59:32,559

you may hear from from her in the future

1570

00:59:36,950 --> 00:59:35,040

and again please get involved um can we

1571

00:59:38,470 --> 00:59:36,960

pop back to that last

1572

00:59:40,150 --> 00:59:38,480

slide

1573

00:59:41,670 --> 00:59:40,160

um actually the one other thing i just

1574

00:59:44,390 --> 00:59:41,680

wanted to mention is many of you know

1575

00:59:46,230 --> 00:59:44,400

remember barry bloomberg there's an

1576  
00:59:47,589 --> 00:59:46,240  
honorary chair for him at the library of

1577  
00:59:50,230 --> 00:59:47,599  
congress

1578  
00:59:52,150 --> 00:59:50,240  
this year's chairs are lucas mix who we

1579  
00:59:54,549 --> 00:59:52,160  
all know and david barron who is

1580  
00:59:57,109 --> 00:59:54,559  
actually a journalist so they spend six

1581  
00:59:59,430 --> 00:59:57,119  
months at the at the library of congress

1582  
01:00:00,470 --> 00:59:59,440  
actually working on

1583  
01:00:02,470 --> 01:00:00,480  
academic

1584  
01:00:04,549 --> 01:00:02,480  
issues that relate

1585  
01:00:06,549 --> 01:00:04,559  
astrobiology exploration in the

1586  
01:00:07,990 --> 01:00:06,559  
humanities

1587  
01:00:10,069 --> 01:00:08,000  
and so

1588  
01:00:11,670 --> 01:00:10,079

they actually have a podcast that i want

1589

01:00:12,870 --> 01:00:11,680

to put a plug-in for we've been tweeting

1590

01:00:14,150 --> 01:00:12,880

about it

1591

01:00:16,150 --> 01:00:14,160

check it out they've interviewed some

1592

01:00:18,549 --> 01:00:16,160

really interesting people about

1593

01:00:19,589 --> 01:00:18,559

astrobiology and exploration and then

1594

01:00:24,150 --> 01:00:19,599

the final

1595

01:00:26,069 --> 01:00:24,160

is just to remind you you all know that

1596

01:00:28,470 --> 01:00:26,079

our planetary

1597

01:00:29,670 --> 01:00:28,480

science and astrobiology decadal survey

1598

01:00:31,789 --> 01:00:29,680

came out

1599

01:00:34,549 --> 01:00:31,799

um we're digesting the

1600

01:00:37,430 --> 01:00:34,559

777 pages of it you guys saw a great

1601  
01:00:38,549 --> 01:00:37,440  
presentation by rob and uh ken up over

1602  
01:00:40,069 --> 01:00:38,559  
lunch

1603  
01:00:41,910 --> 01:00:40,079  
but i wanted to let you know that there

1604  
01:00:43,510 --> 01:00:41,920  
are two other decadal surveys you should

1605  
01:00:45,829 --> 01:00:43,520  
be paying attention to one is the one by

1606  
01:00:47,510 --> 01:00:45,839  
astrophysics um that was already

1607  
01:00:50,230 --> 01:00:47,520  
released pathways to discovery and

1608  
01:00:52,789 --> 01:00:50,240  
astronomy and astrophysics for the 2020s

1609  
01:00:54,950 --> 01:00:52,799  
there's some very important um

1610  
01:00:56,950 --> 01:00:54,960  
findings in their recommendations about

1611  
01:00:58,789 --> 01:00:56,960  
the search for life beyond our solar

1612  
01:01:01,030 --> 01:00:58,799  
system and then the biological and

1613  
01:01:02,870 --> 01:01:01,040

physical sciences are doing um their

1614

01:01:04,870 --> 01:01:02,880

decadal as well and that's expected in

1615

01:01:08,470 --> 01:01:04,880

2023

1616

01:01:11,030 --> 01:01:08,480

and i think then my final slide is

1617

01:01:12,789 --> 01:01:11,040

i am just so pleased and honored to be

1618

01:01:15,349 --> 01:01:12,799

able to share with you

1619

01:01:17,030 --> 01:01:15,359

that uh our very own john barros

1620

01:01:20,789 --> 01:01:17,040

receives the nasa's exceptional

1621

01:01:22,470 --> 01:01:20,799

scientific achievement medal for 2021

1622

01:01:25,589 --> 01:01:22,480

unfortunately he can't be with us at the

1623

01:01:27,349 --> 01:01:25,599

meeting but this was for exceptional

1624

01:01:29,750 --> 01:01:27,359

scientific achievements

1625

01:01:32,470 --> 01:01:29,760

advancing nasa's search for life in the

1626  
01:01:34,630 --> 01:01:32,480  
universe by expanding our understanding

1627  
01:01:37,270 --> 01:01:34,640  
of environments in which life can

1628  
01:01:38,950 --> 01:01:37,280  
originate and thrive and so i would like

1629  
01:01:40,950 --> 01:01:38,960  
to take this opportunity to give him a

1630  
01:01:43,990 --> 01:01:40,960  
giant round of applause

1631  
01:01:45,910 --> 01:01:44,000  
um because it's just an awesome um an

1632  
01:01:47,589 --> 01:01:45,920  
awesome achievement and i'm so glad that

1633  
01:01:50,710 --> 01:01:47,599  
we were able to get this medal for him

1634  
01:01:54,549 --> 01:01:52,470  
people who are there applaud this is

1635  
01:01:56,230 --> 01:01:54,559  
really great

1636  
01:01:57,510 --> 01:01:56,240  
i can't hear but i'm hoping you're doing

1637  
01:02:12,390 --> 01:01:57,520  
that anyway

1638  
01:02:17,589 --> 01:02:15,510

sorry so we have time for some questions

1639

01:02:19,190 --> 01:02:17,599

um if you have a question or comment

1640

01:02:21,589 --> 01:02:19,200

you'd like to make please advance to one

1641

01:02:23,829 --> 01:02:21,599

of the standing microphones and i will

1642

01:02:26,630 --> 01:02:23,839

recognize you please don't forget to

1643

01:02:29,270 --> 01:02:26,640

state your name and your affiliation yes

1644

01:02:31,190 --> 01:02:29,280

hi morgan cable jpl thank you all so

1645

01:02:34,309 --> 01:02:31,200

much for being here for those of you who

1646

01:02:37,270 --> 01:02:34,319

dialed in mary can you hear me all right

1647

01:02:39,270 --> 01:02:37,280

oh good okay hi i had two questions uh

1648

01:02:41,109 --> 01:02:39,280

the first one was that you of all

1649

01:02:42,870 --> 01:02:41,119

presented a wealth of information there

1650

01:02:43,910 --> 01:02:42,880

were a couple of workshops i wasn't even

1651  
01:02:46,630 --> 01:02:43,920  
aware of

1652  
01:02:49,349 --> 01:02:46,640  
is there one place where all of that is

1653  
01:02:51,349 --> 01:02:49,359  
sort of captured like a website we could

1654  
01:02:52,870 --> 01:02:51,359  
go to later on so we don't have to take

1655  
01:02:54,150 --> 01:02:52,880  
screen grabs of all your beautiful

1656  
01:02:56,870 --> 01:02:54,160  
slides

1657  
01:02:59,029 --> 01:02:56,880  
oh my gosh there is an astrobiology

1658  
01:03:02,309 --> 01:02:59,039  
program website and we have tried to

1659  
01:03:04,150 --> 01:03:02,319  
make it as navigable as possible we have

1660  
01:03:06,950 --> 01:03:04,160  
a calendar where we post all the

1661  
01:03:09,109 --> 01:03:06,960  
workshops we try to advertise them as

1662  
01:03:11,670 --> 01:03:09,119  
they become known to us

1663  
01:03:14,230 --> 01:03:11,680

about registering and signing up

1664

01:03:16,309 --> 01:03:14,240

um we have links on our page i mean we

1665

01:03:18,549 --> 01:03:16,319

have like 60 some pages of frequently

1666

01:03:21,270 --> 01:03:18,559

asked questions about

1667

01:03:22,870 --> 01:03:21,280

our funding opportunities the rcns with

1668

01:03:25,029 --> 01:03:22,880

additional links to get you more

1669

01:03:27,270 --> 01:03:25,039

information or to get you to a human to

1670

01:03:29,510 --> 01:03:27,280

talk about what you need to know and we

1671

01:03:31,109 --> 01:03:29,520

plan on posting these little updates

1672

01:03:32,549 --> 01:03:31,119

just to draw some attention to some

1673

01:03:34,630 --> 01:03:32,559

things that we thought we needed to talk

1674

01:03:36,950 --> 01:03:34,640

about with you here so we'll post these

1675

01:03:38,630 --> 01:03:36,960

slides on that site too that is

1676

01:03:40,789 --> 01:03:38,640

wonderful all right i will definitely

1677

01:03:43,510 --> 01:03:40,799

check that out and my second question if

1678

01:03:47,349 --> 01:03:43,520

i may really quickly is is for lori

1679

01:03:49,510 --> 01:03:47,359

hi so nf5 you know coming out soon-ish

1680

01:03:52,230 --> 01:03:49,520

when when can we expect any potential

1681

01:03:54,870 --> 01:03:52,240

details about oh i don't know cost cap

1682

01:03:57,029 --> 01:03:54,880

and things like that

1683

01:03:58,870 --> 01:03:57,039

that is a great question

1684

01:04:00,950 --> 01:03:58,880

um so yeah the question has to do with

1685

01:04:03,029 --> 01:04:00,960

the new frontiers five call and we've

1686

01:04:05,270 --> 01:04:03,039

indicated that um that is going to be

1687

01:04:08,870 --> 01:04:05,280

moved forward we had you know shifted it

1688

01:04:11,589 --> 01:04:08,880

out to 2024 and now we're um i'm sorry

1689

01:04:13,750 --> 01:04:11,599

yeah 2024 we're now thinking of trying

1690

01:04:16,630 --> 01:04:13,760

to get that released in 2023

1691

01:04:18,789 --> 01:04:16,640

um the schedule that you can expect is

1692

01:04:20,309 --> 01:04:18,799

that there will be an announcement very

1693

01:04:22,710 --> 01:04:20,319

very soon to let you know what the

1694

01:04:24,470 --> 01:04:22,720

schedule is going to look like and so

1695

01:04:26,390 --> 01:04:24,480

the first announcement will really be

1696

01:04:27,829 --> 01:04:26,400

pretty bare bones with just schedule

1697

01:04:30,470 --> 01:04:27,839

information of when you're going to know

1698

01:04:33,190 --> 01:04:30,480

what and when the proposals will be due

1699

01:04:35,109 --> 01:04:33,200

and within that schedule it will contain

1700

01:04:36,710 --> 01:04:35,119

more information about when you will get

1701

01:04:39,190 --> 01:04:36,720

the community announcement that contains

1702

01:04:41,109 --> 01:04:39,200

the details you're actually looking for

1703

01:04:42,789 --> 01:04:41,119

which will include cost cap and other

1704

01:04:43,910 --> 01:04:42,799

parameters that you need to design the

1705

01:04:47,430 --> 01:04:43,920

missions

1706

01:04:56,549 --> 01:04:49,589

how are we handling questions online or

1707

01:05:00,309 --> 01:04:58,710

mary can you see the chat or lindsay can

1708

01:05:02,870 --> 01:05:00,319

you guys see the chat is there any

1709

01:05:05,829 --> 01:05:02,880

questions yeah we have

1710

01:05:07,510 --> 01:05:05,839

yeah we have one question there um

1711

01:05:08,870 --> 01:05:07,520

and mary do you want to answer this one

1712

01:05:11,029 --> 01:05:08,880

i'm also getting a note that we need to

1713

01:05:14,710 --> 01:05:11,039

close down the room um because this

1714

01:05:16,069 --> 01:05:14,720

session is ending now um i uh

1715

01:05:18,069 --> 01:05:16,079

i'm not sure

1716

01:05:20,150 --> 01:05:18,079

do we want to ask the one question we

1717

01:05:21,829 --> 01:05:20,160

have online i think i can see one person

1718

01:05:22,549 --> 01:05:21,839

standing in a microphone can we yeah i

1719

01:05:24,230 --> 01:05:22,559

can

1720

01:05:25,750 --> 01:05:24,240

go with that

1721

01:05:28,549 --> 01:05:25,760

yeah so the question was have you

1722

01:05:31,029 --> 01:05:28,559

contemplated a specific mission rcn one

1723

01:05:34,150 --> 01:05:31,039

that could support astrobiology on all

1724

01:05:35,670 --> 01:05:34,160

on all of nasa's portfolio of missions

1725

01:05:37,510 --> 01:05:35,680

something that could integrate across

1726

01:05:40,390 --> 01:05:37,520

the existing rcns

1727

01:05:42,230 --> 01:05:40,400

um that's a really great it's from uh

1728

01:05:44,150 --> 01:05:42,240

andrew steele at carnegie that's a

1729

01:05:45,349 --> 01:05:44,160

really great idea to consider we

1730

01:05:47,430 --> 01:05:45,359

actually have

1731

01:05:48,829 --> 01:05:47,440

tried to think about the best way to

1732

01:05:51,910 --> 01:05:48,839

integrate across the

1733

01:05:54,150 --> 01:05:51,920

rcns um and

1734

01:05:57,190 --> 01:05:54,160

again one of the ideas that we had had

1735

01:05:59,270 --> 01:05:57,200

was to infuse them into uh s biologists

1736

01:06:00,710 --> 01:05:59,280

into an ag but i think the rcn

1737

01:06:03,109 --> 01:06:00,720

structures might be the way to go so

1738

01:06:06,710 --> 01:06:03,119

that's a great suggestion thank you

1739

01:06:08,950 --> 01:06:06,720

steely and the last question belongs to

1740

01:06:11,829 --> 01:06:08,960

avi mendel nasa goddard it was actually

1741

01:06:13,510 --> 01:06:11,839

quite related to the last question is

1742

01:06:15,910 --> 01:06:13,520

that now that

1743

01:06:18,870 --> 01:06:15,920

exoplanet missions are really becoming

1744

01:06:21,270 --> 01:06:18,880

planetary science missions

1745

01:06:22,950 --> 01:06:21,280

and planetary science usually supports

1746

01:06:26,549 --> 01:06:22,960

interpretation

1747

01:06:29,349 --> 01:06:26,559

of planetary science missions

1748

01:06:32,470 --> 01:06:29,359

and i'm not sure you know the rcn

1749

01:06:34,710 --> 01:06:32,480

question is related but is there a plan

1750

01:06:36,789 --> 01:06:34,720

long term to think about how planetary

1751

01:06:40,230 --> 01:06:36,799

science can begin supporting more

1752

01:06:42,470 --> 01:06:40,240

directly the interpretation of exoplanet

1753

01:06:43,990 --> 01:06:42,480

science coming down from

1754

01:06:49,029 --> 01:06:44,000

non-planetary

1755

01:06:52,150 --> 01:06:50,710

so many did you want to say anything on

1756

01:06:53,109 --> 01:06:52,160

that one first or would you like me to

1757

01:06:57,510 --> 01:06:53,119

take that

1758

01:06:58,549 --> 01:06:57,520

because i think at your level that we do

1759

01:07:00,549 --> 01:06:58,559

sure

1760

01:07:02,230 --> 01:07:00,559

so thank you for the question avi and

1761

01:07:03,670 --> 01:07:02,240

and you're right i mean the

1762

01:07:05,750 --> 01:07:03,680

what we're seeing is kind of this

1763

01:07:07,990 --> 01:07:05,760

blurring between the divisions right um

1764

01:07:09,910 --> 01:07:08,000

that the the the stove pipes that we

1765

01:07:11,510 --> 01:07:09,920

have become irrelevant at some point

1766

01:07:13,270 --> 01:07:11,520

that the science we need to do is going

1767

01:07:16,470 --> 01:07:13,280

to cross over between the expertise

1768

01:07:19,029 --> 01:07:16,480

that's in astrophysics and in this case

1769

01:07:20,789 --> 01:07:19,039

probably a large mission funded by

1770

01:07:23,430 --> 01:07:20,799

astrophysics but the science is going to

1771

01:07:25,430 --> 01:07:23,440

cross over into into the planetary realm

1772

01:07:26,870 --> 01:07:25,440

where we you know the the planetary

1773

01:07:29,190 --> 01:07:26,880

astrobiology side of the community

1774

01:07:31,670 --> 01:07:29,200

really has the needed expertise

1775

01:07:34,230 --> 01:07:31,680

so you know we are having conversations

1776

01:07:37,510 --> 01:07:34,240

about how we make sure that we have that

1777

01:07:39,190 --> 01:07:37,520

needed expertise at the very beginning

1778

01:07:40,789 --> 01:07:39,200

to make sure that if there are science

1779

01:07:42,710 --> 01:07:40,799

definition teams that we're getting the

1780

01:07:44,470 --> 01:07:42,720

right expertise there

1781

01:07:46,309 --> 01:07:44,480

both from a planetary science

1782

01:07:47,510 --> 01:07:46,319

perspective and also astrobiology

1783

01:07:49,589 --> 01:07:47,520

perspective

1784

01:07:51,589 --> 01:07:49,599

um and then i think you know part of

1785

01:07:55,029 --> 01:07:51,599

that planning as we go forward is going

1786

01:07:57,670 --> 01:07:55,039

to be how do we assure or ensure

1787

01:08:01,589 --> 01:07:57,680

that we we have things in place for for

1788

01:08:02,870 --> 01:08:01,599

planetary science analyses of of data

1789

01:08:05,829 --> 01:08:02,880

you know we're already seeing this the

1790

01:08:10,150 --> 01:08:05,839

other way around um for example working

1791

01:08:10,950 --> 01:08:10,160

with astrophysics right now um to uh you

1792

01:08:13,190 --> 01:08:10,960

know

1793

01:08:14,870 --> 01:08:13,200

think about uh how astrophysics

1794

01:08:16,709 --> 01:08:14,880

community is going to use data from for

1795

01:08:18,070 --> 01:08:16,719

example the neo surveyor mission which

1796

01:08:19,590 --> 01:08:18,080

is the near earth object surveyor

1797

01:08:21,590 --> 01:08:19,600

mission which is a planetary science

1798

01:08:23,510 --> 01:08:21,600

mission to detect and characterize

1799

01:08:25,189 --> 01:08:23,520

near-earth objects but the the

1800

01:08:27,030 --> 01:08:25,199

astrophysics community is also

1801

01:08:29,510 --> 01:08:27,040

interested in those data so we're we're

1802

01:08:31,829 --> 01:08:29,520

looking at ways that we can enable that

1803

01:08:33,669 --> 01:08:31,839

work in the other direction and i'm you

1804

01:08:35,590 --> 01:08:33,679

know optimistic that we're going to find

1805

01:08:37,349 --> 01:08:35,600

good ways to to work the other way as

1806

01:08:44,309 --> 01:08:37,359

well

1807

01:08:46,550 --> 01:08:44,319

interest and attention um