



**NEXT BIG THING:
GENETIC DATA FROM SPACE STATION**

GGTTGTTTCTGTTGGTGCTGATATTGCTTT



1
00:00:09,350 --> 00:00:06,710
it's absolutely out of this world class

2
00:00:11,830 --> 00:00:09,360
because we've got an environment that

3
00:00:13,509 --> 00:00:11,840
low-earth orbit gives us access to that

4
00:00:16,310 --> 00:00:13,519
has conditions both internal in the

5
00:00:19,029 --> 00:00:16,320
microgravity environment and external in

6
00:00:21,590 --> 00:00:19,039
terms of the access to the viewpoint the

7
00:00:23,990 --> 00:00:21,600
radiation the atomic oxygen that you

8
00:00:30,480 --> 00:00:24,000
just can't get in any laboratory here on

9
00:00:34,310 --> 00:00:32,069
[Music]

10
00:00:36,229 --> 00:00:34,320
we're really hoping that all of these

11
00:00:38,150 --> 00:00:36,239
investigators who come on board not only

12
00:00:39,830 --> 00:00:38,160
learn what they were hoping to learn but

13
00:00:41,430 --> 00:00:39,840

make these wonderful discoveries along

14

00:00:43,030 --> 00:00:41,440

the way last year

15

00:00:45,430 --> 00:00:43,040

scott smith in the

16

00:00:46,470 --> 00:00:45,440

nutrition study published some of our

17

00:00:48,950 --> 00:00:46,480

first

18

00:00:52,549 --> 00:00:48,960

data on genetic analysis of our

19

00:00:55,590 --> 00:00:52,559

astronauts in space and this analysis is

20

00:00:57,350 --> 00:00:55,600

really the first use of genetic data on

21

00:00:59,029 --> 00:00:57,360

board the space station it's an amazing

22

00:01:00,869 --> 00:00:59,039

paper and it's great and it's related to

23

00:01:03,700 --> 00:01:00,879

the vision loss problem which is one of

24

00:01:11,350 --> 00:01:03,710

our top tier issues that we have

25

00:01:14,149 --> 00:01:11,360

[Music]

26

00:01:16,149 --> 00:01:14,159

we're in this new era of genetic data

27

00:01:18,310 --> 00:01:16,159

collection so a number of these projects

28

00:01:19,670 --> 00:01:18,320

like biomolecules sequence here are

29

00:01:20,870 --> 00:01:19,680

responses

30

00:01:25,830 --> 00:01:20,880

to

31

00:01:27,990 --> 00:01:25,840

payloads consumer off the shelf payloads

32

00:01:30,390 --> 00:01:28,000

into the space station and operating on

33

00:01:33,030 --> 00:01:30,400

space station the end result of that is

34

00:01:35,590 --> 00:01:33,040

we get to these next generation devices

35

00:01:37,270 --> 00:01:35,600

earlier and we are able to get the data

36

00:01:39,830 --> 00:01:37,280

back to the ground quicker for the

37

00:01:42,149 --> 00:01:39,840

experimenters to verify verify and

38

00:01:44,069 --> 00:01:42,159

validate their hypothesis and then come

39

00:01:46,550 --> 00:01:44,079

up with that next follow-on

40

00:01:48,870 --> 00:01:46,560

investigation that may really hold