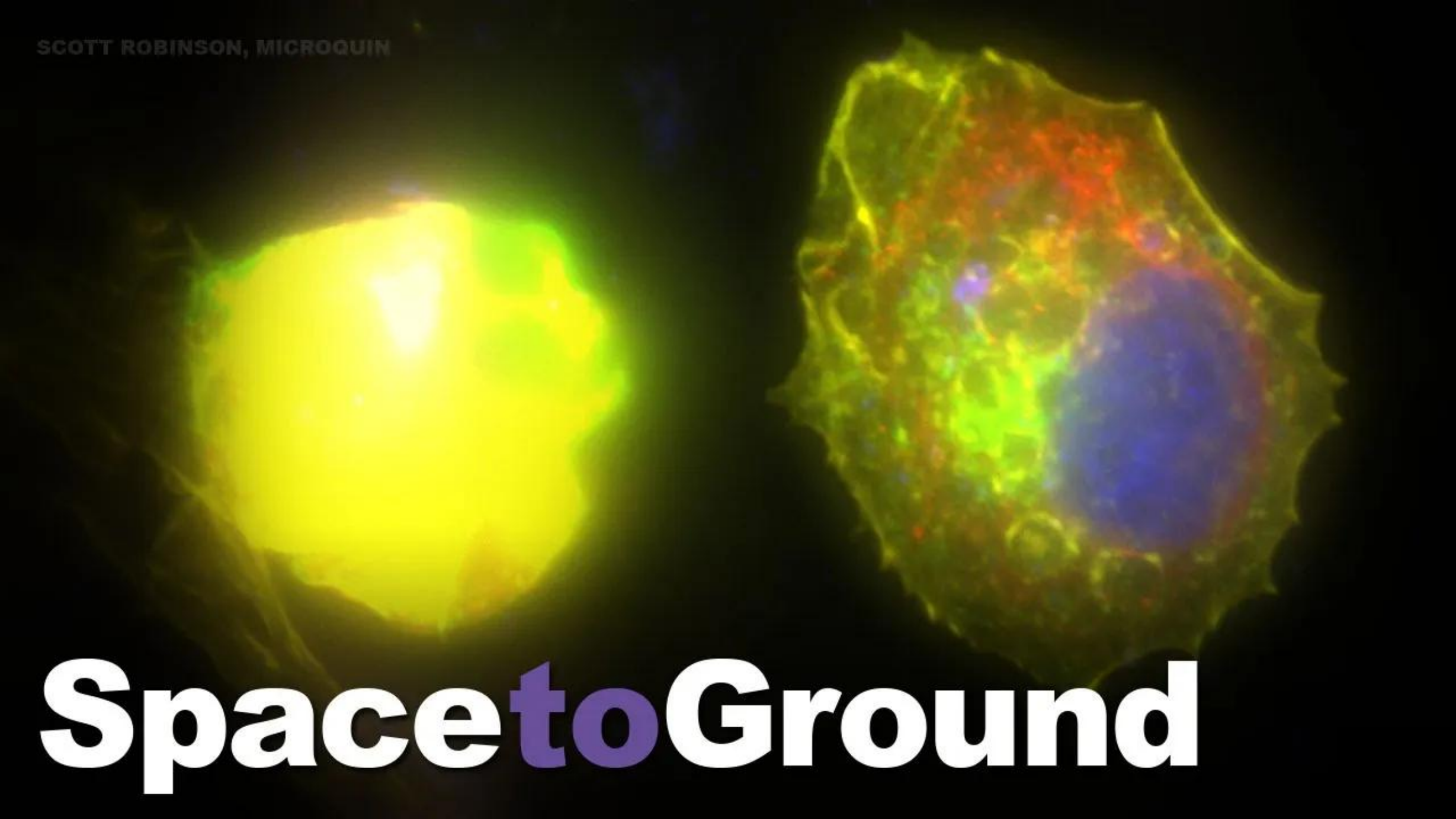

SpacetoGround

1
00:00:06,550 --> 00:00:05,030
houston station on space to ground

2
00:00:09,030 --> 00:00:06,560
welcome to space to ground i'm chelsea

3
00:00:11,270 --> 00:00:09,040
vallarte on the space station astronauts

4
00:00:14,070 --> 00:00:11,280
expect a delivery of not one but two

5
00:00:18,470 --> 00:00:14,080
cargo spacecrafts this week

6
00:00:19,910 --> 00:00:18,480
and liftoff liftoff of progress 80.

7
00:00:22,070 --> 00:00:19,920
love was not the only thing in the air

8
00:00:23,830 --> 00:00:22,080
on february 14th when a russian cargo

9
00:00:25,589 --> 00:00:23,840
spacecraft launched to the space station

10
00:00:28,950 --> 00:00:25,599
from the baikonur cosmodrome in

11
00:00:30,630 --> 00:00:28,960
kazakhstan at 11 25 pm eastern

12
00:00:32,549 --> 00:00:30,640
progress 80 dock to the space station

13
00:00:34,470 --> 00:00:32,559

three days later delivering food fuel

14
00:00:35,830 --> 00:00:34,480
and supplies to the crew

15
00:00:37,510 --> 00:00:35,840
speaking of valentine's day the

16
00:00:38,950 --> 00:00:37,520
astronauts aboard the space station may

17
00:00:40,790 --> 00:00:38,960
have spent the holiday away from their

18
00:00:42,950 --> 00:00:40,800
loved ones on earth but still made the

19
00:00:45,190 --> 00:00:42,960
most of their day with their crewmates

20
00:00:46,950 --> 00:00:45,200
astronaut kayla baron posted this photo

21
00:00:48,630 --> 00:00:46,960
she took from the space station wishing

22
00:00:51,670 --> 00:00:48,640
everyone on the planet a happy

23
00:00:53,590 --> 00:00:51,680
valentine's day from off the planet

24
00:00:55,029 --> 00:00:53,600
a second cargo spacecraft is making its

25
00:00:57,430 --> 00:00:55,039
way to the international space station

26
00:00:59,029 --> 00:00:57,440
later this week too carrying scientific

27
00:01:00,630 --> 00:00:59,039
experiments that will give researchers a

28
00:01:02,389 --> 00:01:00,640
better look at plant root growth and

29
00:01:04,390 --> 00:01:02,399
cancer cell growth

30
00:01:06,550 --> 00:01:04,400
growing plants in space involve soil

31
00:01:07,670 --> 00:01:06,560
which can be heavy and require a lot of

32
00:01:09,350 --> 00:01:07,680
maintenance

33
00:01:11,350 --> 00:01:09,360
one experiment launching on northrop

34
00:01:12,390 --> 00:01:11,360
grumman's 17th resupply mission hopes to

35
00:01:14,469 --> 00:01:12,400
change that

36
00:01:17,749 --> 00:01:14,479
the x-roots experiment is looking to use

37
00:01:20,789 --> 00:01:17,759
hydroponic or water-based or aeroponic

38
00:01:22,710 --> 00:01:20,799

air-based techniques to reduce mass it

39
00:01:24,550 --> 00:01:22,720
will allow astronauts and researchers

40
00:01:25,590 --> 00:01:24,560
the ability to watch the route as they

41
00:01:27,190 --> 00:01:25,600
grow

42
00:01:29,910 --> 00:01:27,200
another experiment launching is called

43
00:01:31,830 --> 00:01:29,920
the micro quinn 3d experiment it will

44
00:01:33,749 --> 00:01:31,840
look at the effects of a drug on breast

45
00:01:35,109 --> 00:01:33,759
and prostate cancer cells

46
00:01:37,270 --> 00:01:35,119
they'll be using the microgravity

47
00:01:39,109 --> 00:01:37,280
environment to grow the cells in a 3d

48
00:01:41,350 --> 00:01:39,119
model allowing researchers to get a

49
00:01:43,030 --> 00:01:41,360
better look the micro quinn 3d

50
00:01:44,789 --> 00:01:43,040
experiment hopes to make researchers

51
00:01:47,190 --> 00:01:44,799
smarter about disease progression and

52
00:01:49,190 --> 00:01:47,200
drug resistance so one day we might see

53
00:01:51,190 --> 00:01:49,200
new treatments for cancer patients on

54
00:01:53,429 --> 00:01:51,200
earth that are more effective and have

55
00:01:55,190 --> 00:01:53,439
better patient outcomes

56
00:01:57,270 --> 00:01:55,200
cygnus is expected to launch with these

57
00:01:59,990 --> 00:01:57,280
experiments and more shortly after noon

58
00:02:01,590 --> 00:02:00,000
on saturday february 19th the spacecraft

59
00:02:03,429 --> 00:02:01,600
will lift off from nasa's wallop flight

60
00:02:05,190 --> 00:02:03,439
facility in virginia atop a northrop

61
00:02:06,709 --> 00:02:05,200
grumman and terry's rocket

62
00:02:09,589 --> 00:02:06,719
it'll arrive at the space station two

63
00:02:11,510 --> 00:02:09,599

days later on monday february 21st

64
00:02:13,270 --> 00:02:11,520
coverage of the rendezvous and capture

65
00:02:15,670 --> 00:02:13,280
begins at 3 a.m eastern with

66
00:02:17,430 --> 00:02:15,680
installation coverage at 6 00 am you can

67
00:02:20,869 --> 00:02:17,440
catch all of these events live on nasa

68
00:02:22,790 --> 00:02:20,879
tv nasa.gov or on your nasa app

69
00:02:25,190 --> 00:02:22,800
this cygnus is dubbed the ss pure

70
00:02:26,869 --> 00:02:25,200
sellers a nod to the late nasa astronaut

71
00:02:28,869 --> 00:02:26,879
who played a vital role in the assembly

72
00:02:32,070 --> 00:02:28,879
of the space station and a champion of

73
00:02:33,350 --> 00:02:32,080
earth science at nasa during his career

74
00:02:35,350 --> 00:02:33,360
you can keep up with all of these

75
00:02:38,390 --> 00:02:35,360
experiments and more by following us on

76
00:02:39,990 --> 00:02:38,400
twitter at iss underscore research

77
00:02:41,620 --> 00:02:40,000
that's all for today on space to ground