

Life Sciences Glovebox (LSG)



Space **to** Ground

1
00:00:06,869 --> 00:00:04,950
houston station on space to ground

2
00:00:09,350 --> 00:00:06,879
welcome to space to ground i'm sandra

3
00:00:11,270 --> 00:00:09,360
jones this week the crew unpacked and

4
00:00:13,430 --> 00:00:11,280
began science investigations that

5
00:00:15,190 --> 00:00:13,440
arrived on a cargo vehicle and two

6
00:00:18,070 --> 00:00:15,200
astronauts are about to head out the

7
00:00:20,390 --> 00:00:18,080
space station hatch for a spacewalk

8
00:00:22,390 --> 00:00:20,400
last week four tons of supplies and

9
00:00:24,390 --> 00:00:22,400
investigations arrived to the orbiting

10
00:00:27,349 --> 00:00:24,400
laboratory on the northrop grumman

11
00:00:29,589 --> 00:00:27,359
crs-16 cargo craft and the crew has been

12
00:00:31,669 --> 00:00:29,599
busy unpacking the vehicle and getting

13
00:00:33,430 --> 00:00:31,679

started on the science inside

14

00:00:35,750 --> 00:00:33,440

one of those science experiments the

15

00:00:37,990 --> 00:00:35,760

cardinal muscle investigation tests

16

00:00:40,229 --> 00:00:38,000

whether microgravity can be used as a

17

00:00:43,030 --> 00:00:40,239

research tool for understanding and

18

00:00:45,830 --> 00:00:43,040

treating muscle loss on earth expedition

19

00:00:47,590 --> 00:00:45,840

65 commander aki hoshide worked this

20

00:00:49,830 --> 00:00:47,600

week on the cell gravisensing

21

00:00:51,910 --> 00:00:49,840

investigation which studies how cells

22

00:00:53,910 --> 00:00:51,920

can detect gravity and changes in

23

00:00:55,830 --> 00:00:53,920

tension during space flight

24

00:00:57,750 --> 00:00:55,840

the ring shear drop investigation

25

00:01:00,150 --> 00:00:57,760

studies the formation of potentially

26

00:01:02,150 --> 00:01:00,160

destructive protein clusters like those

27

00:01:04,789 --> 00:01:02,160

found in patients battling alzheimer's

28

00:01:06,310 --> 00:01:04,799

and parkinson's ring-shared drop uses

29

00:01:08,390 --> 00:01:06,320

the surface tension of the liquid

30

00:01:10,630 --> 00:01:08,400

specimens to act as the container for

31

00:01:12,390 --> 00:01:10,640

the experiment to learn more about all

32

00:01:14,710 --> 00:01:12,400

of the science and research happening on

33

00:01:17,429 --> 00:01:14,720

the space station follow us on twitter

34

00:01:19,350 --> 00:01:17,439

at iss underscore research

35

00:01:21,590 --> 00:01:19,360

two astronauts will take a break from

36

00:01:22,550 --> 00:01:21,600

science to step out into the vacuum of

37

00:01:25,429 --> 00:01:22,560

space

38

00:01:27,590 --> 00:01:25,439

on tuesday august 24th jaxa astronaut

39

00:01:29,990 --> 00:01:27,600

and current space station commander aki

40

00:01:32,069 --> 00:01:30,000

hoshide and nasa astronaut mark vanda

41

00:01:33,109 --> 00:01:32,079

high will suit up and venture outside

42

00:01:35,190 --> 00:01:33,119

the hatch

43

00:01:37,190 --> 00:01:35,200

during the spacewalk the duo will build

44

00:01:40,149 --> 00:01:37,200

and install a bracket that will be used

45

00:01:43,030 --> 00:01:40,159

to attach an iss rollout solar array or

46

00:01:44,710 --> 00:01:43,040

irosa in a future spacewalk because of

47

00:01:46,630 --> 00:01:44,720

the size of the bracket it is sent to

48

00:01:48,710 --> 00:01:46,640

space in pieces and assembled in

49

00:01:50,710 --> 00:01:48,720

microgravity similar to how we put

50

00:01:52,789 --> 00:01:50,720

together furniture here on earth the

51
00:01:54,710 --> 00:01:52,799
crew will also swap out parts on the

52
00:01:57,109 --> 00:01:54,720
floating potential measurement unit to

53
00:01:59,270 --> 00:01:57,119
ensure it can provide readings for years

54
00:02:01,910 --> 00:01:59,280
to come we'll be covering the entire

55
00:02:04,069 --> 00:02:01,920
spacewalk live on nasa tv the agency's

56
00:02:06,310 --> 00:02:04,079
website and the nasa app tune in

57
00:02:07,350 --> 00:02:06,320
beginning at 7am eastern time to check

58
00:02:09,350 --> 00:02:07,360
it out

59
00:02:11,670 --> 00:02:09,360
also be sure to watch our coverage of

60
00:02:13,750 --> 00:02:11,680
the upcoming launch of the spacex cargo

61
00:02:16,150 --> 00:02:13,760
resupply vehicle blasting off from

62
00:02:19,270 --> 00:02:16,160
launch pad 39a at the kennedy space

63
00:02:21,750 --> 00:02:19,280

center in florida crs-23 is slated to

64

00:02:23,350 --> 00:02:21,760

launch on august 28th and will be packed

65

00:02:25,350 --> 00:02:23,360

full of supplies and science

66

00:02:27,589 --> 00:02:25,360

investigations with a ticket to the

67

00:02:29,750 --> 00:02:27,599

international space station

68

00:02:31,430 --> 00:02:29,760

and that's space to ground for this week

69

00:02:32,790 --> 00:02:31,440

thanks so much for watching we'll see

70

00:02:42,630 --> 00:02:32,800

you next week

71

00:02:57,270 --> 00:02:44,790

so

72

00:03:06,070 --> 00:02:59,910

subscribe for more space