1
00:00:05,190 --> 00:00:03,270
spacex 4 is preparing for launch to the

2
00:00:07,430 --> 00:00:05,200
space station later this week and with

3
00:00:09,910 --> 00:00:07,440
that tons of supplies and new research

4
00:00:12,390 --> 00:00:09,920
are headed to the station it all happens

5
00:00:14,709 --> 00:00:12,400
at cape canaveral in florida and lori

6
00:00:16,310 --> 00:00:14,719
meigs is live today from nearby kennedy

7
00:00:18,870 --> 00:00:16,320
space center to talk about one of the

8
00:00:20,870 --> 00:00:18,880
interesting investigations lori

9
00:00:22,870 --> 00:00:20,880
hi amiko yeah we're here live at kennedy

10
00:00:24,150 --> 00:00:22,880
space center and that is where a lot of

11
00:00:25,990 --> 00:00:24,160
the important work is going on to

12
00:00:27,830 --> 00:00:26,000
process those payloads and get them

13
00:00:29,830 --> 00:00:27,840

ready for launch joining me now is

14
00:00:31,750 --> 00:00:29,840
cecilia wigley she's from ames research

15
00:00:33,590 --> 00:00:31,760
center and she is responsible for

16
00:00:34,630 --> 00:00:33,600
leading the team that is helping process

17
00:00:37,750 --> 00:00:34,640
and get these

18
00:00:39,430 --> 00:00:37,760
these payloads ready for orbit cecilia

19
00:00:40,470 --> 00:00:39,440
tell us about your rodent research

20
00:00:42,630 --> 00:00:40,480
project that's what we're going to talk

21
00:00:45,110 --> 00:00:42,640
about today okay so the rodent research

22
00:00:47,190 --> 00:00:45,120
one project is the first in a series of

23
00:00:50,549 --> 00:00:47,200
road research activities that we'll be

24
00:00:53,110 --> 00:00:50,559
conducting on space station we plan to

25
00:00:54,869 --> 00:00:53,120
fly about twice a year on every even

26
00:00:56,389 --> 00:00:54,879
numbered spacex

27
00:00:58,389 --> 00:00:56,399
and there's a history behind this too in

28
00:01:01,670 --> 00:00:58,399
history yes we have a long history of

29
00:01:04,549 --> 00:01:01,680
flying uh and doing experiments with

30
00:01:06,390 --> 00:01:04,559
rodents uh both mice and rats on the

31
00:01:08,070 --> 00:01:06,400
shuttle and now we're moving this to the

32
00:01:09,510 --> 00:01:08,080
new platform of the space station tell

33
00:01:11,350 --> 00:01:09,520
us about your role here and how you've

34
00:01:13,190 --> 00:01:11,360
been preparing everything here at

35
00:01:14,630 --> 00:01:13,200
kennedy okay well i lead the team that's

36
00:01:16,149 --> 00:01:14,640
responsible for integrating all the

37
00:01:17,670 --> 00:01:16,159
various requirements that come from

38
00:01:20,469 --> 00:01:17,680

science

39
00:01:22,469 --> 00:01:20,479
to implement the the research on station

40
00:01:24,789 --> 00:01:22,479
so we work with the crew office and do

41
00:01:26,469 --> 00:01:24,799
crew training crew procedures

42
00:01:29,830 --> 00:01:26,479
what we've been doing here of course the

43
00:01:31,270 --> 00:01:29,840
mice have arrived and we're making sure

44
00:01:33,190 --> 00:01:31,280
that they're housed appropriately in the

45
00:01:35,590 --> 00:01:33,200
animal care facility here and then our

46
00:01:38,870 --> 00:01:35,600
hardware team is processing the hardware

47
00:01:40,789 --> 00:01:38,880
that we'll be launching on spacex4 with

48
00:01:43,109 --> 00:01:40,799
the rodents and the support hardware

49
00:01:44,950 --> 00:01:43,119
needed and we're taking a look here and

50
00:01:47,270 --> 00:01:44,960
i guess their their their habitat their

51
00:01:49,830 --> 00:01:47,280
habitats right so what we have there is

52
00:01:51,830 --> 00:01:49,840
basically the habitats the transporter

53
00:01:52,870 --> 00:01:51,840
and then the access unit that we'll be

54
00:01:55,270 --> 00:01:52,880
using

55
00:01:57,270 --> 00:01:55,280
to move the animals back and forth

56
00:01:59,109 --> 00:01:57,280
between the various pieces of hardware

57
00:02:00,230 --> 00:01:59,119
we'll be using and it is important

58
00:02:02,230 --> 00:02:00,240
research with the mice what are we

59
00:02:04,469 --> 00:02:02,240
trying to learn from all of this uh well

60
00:02:06,469 --> 00:02:04,479
on the shuttle we were limited to the

61
00:02:09,029 --> 00:02:06,479
length of a shuttle flight so basically

62
00:02:09,990 --> 00:02:09,039
14 to 16 days was the maximum we were

63
00:02:11,430 --> 00:02:10,000

able to

64
00:02:13,430 --> 00:02:11,440
do experiments

65
00:02:15,510 --> 00:02:13,440
with moving to the station as a platform

66
00:02:17,910 --> 00:02:15,520
we can now do long duration experiments

67
00:02:20,150 --> 00:02:17,920
this first one will be 30 days and then

68
00:02:22,309 --> 00:02:20,160
we'll be moving on to 60 and 90 day and

69
00:02:24,470 --> 00:02:22,319
potentially longer experiments on

70
00:02:26,070 --> 00:02:24,480
station to be able to look at long-term

71
00:02:27,430 --> 00:02:26,080
effects of microgravity and living

72
00:02:29,270 --> 00:02:27,440
systems

73
00:02:31,750 --> 00:02:29,280
and let's talk about cases and nasa the

74
00:02:33,190 --> 00:02:31,760
partnership here so um basically road

75
00:02:35,830 --> 00:02:33,200
research is going to be a partnership

76
00:02:37,509 --> 00:02:35,840
between nasa and cases which is the

77
00:02:38,869 --> 00:02:37,519
center for the advancements of science

78
00:02:40,949 --> 00:02:38,879
and space

79
00:02:41,990 --> 00:02:40,959
cases will be bringing in commercial

80
00:02:42,670 --> 00:02:42,000
partners

81
00:02:45,670 --> 00:02:42,680
and

82
00:02:47,990 --> 00:02:45,680
non-nasa-funded research so

83
00:02:49,589 --> 00:02:48,000
potentially academia or other government

84
00:02:51,830 --> 00:02:49,599
agencies

85
00:02:53,990 --> 00:02:51,840
and the first in a series but we've got

86
00:02:56,470 --> 00:02:54,000
to get this one off this one off right

87
00:02:58,309 --> 00:02:56,480
so what happens if we don't get through

88
00:02:59,910 --> 00:02:58,319

those launch windows well we have two

89
00:03:02,149 --> 00:02:59,920
attempts in this first launch window

90
00:03:04,309 --> 00:03:02,159
either saturday or sunday or early in

91
00:03:05,190 --> 00:03:04,319
the morning if we don't go by sunday

92
00:03:07,430 --> 00:03:05,200
then

93
00:03:08,949 --> 00:03:07,440
the hardware will be returned to us with

94
00:03:10,949 --> 00:03:08,959
the mice inside

95
00:03:13,430 --> 00:03:10,959
and we will offload them over in the

96
00:03:14,790 --> 00:03:13,440
animal care facility and start to

97
00:03:16,229 --> 00:03:14,800
prepare the hardware for another