SCIENCE LAUNCHING
TO SPACE STATION

1
00:00:00,333 --> 00:00:03,436
WHY ARE WE SENDING
A 3D BIOPRINTER,

2
00:00:03,436 --> 00:00:06,840
OVARIAN CELLS,

3
00:00:06,840 --> 00:00:12,345
AND SEEDS TO THE
SPACE STATION?

4
00:00:12,345 --> 00:00:17,951
DOZENS OF NEW EXPERIMENTS WILL SOON
ARRIVE AT THE INTERNATIONAL SPACE STATION

5
00:00:17,951 --> 00:00:22,188
FOR THE BENEFIT OF HUMANITY AND
FUTURE MISSIONS TO SPACE

6
00:00:22,188 --> 00:00:26,292
LET'S TAKE A LOOK AT WHAT'S ON BOARD
NORTHROP GRUMMAN'S 18TH CARGO MISSION

7
00:00:26,292 --> 00:00:31,431
The BioFabrication Facility
will return to space

8
00:00:31,431 --> 00:00:38,671
and in future missions will attempt to 3D print
knee cartilage tissue using bioinks and cells.

9
00:00:38,671 --> 00:00:44,878
Researchers will examine a
slurry of air, water, and sand

10
00:00:44,878 --> 00:00:50,917
in microgravity to better understand the
properties of dangerous mudflows.

11

00:00:50,917 --> 00:00:57,057
Seeds produced by space-grown plants will be
returned to Earth, processed, and flown back to space.

12
00:00:57,057 --> 00:01:03,997
Researchers will study if this gives an
adaptive advantage to the next generation.

13
00:01:03,997 --> 00:01:10,603
CubeSats developed by students from
Uganda, Zimbabwe, and Japan

14
00:01:10,603 --> 00:01:17,043
will acquire Earth data that can be
applied by their home countries.

15
00:01:17,043 --> 00:01:23,283
Scientists will study ovarian cells in
microgravity to improve fertility treatments

16
00:01:23,283 --> 00:01:29,122
on Earth and prepare for
human settlement in space.

17
00:01:29,122 --> 00:01:33,059
THESE EXPERIMENTS WILL JOIN THE
HUNDREDS OF ONGOING INVESTIGATIONS

18
00:01:33,059 --> 00:01:36,529
ABOARD THE
ORBITING LABORATORY.