
SCIENCE LAUNCHING
TO SPACE STATION

1
00:00:00,333 --> 00:00:03,436
WHY ARE WE SENDING
HEART TISSUES

2
00:00:03,436 --> 00:00:06,840
BIOFILMS

3
00:00:06,840 --> 00:00:09,843
AND BACTERIA
TO SPACE?

4
00:00:12,345 --> 00:00:16,549
DOZENS OF NEW EXPERIMENTS WILL SOON
ARRIVE AT THE INTERNATIONAL SPACE STATION

5
00:00:16,549 --> 00:00:20,787
FOR THE BENEFIT OF HUMANITY AND
FUTURE MISSIONS TO SPACE

6
00:00:20,787 --> 00:00:24,457
LET'S TAKE A LOOK AT WHAT'S ON BOARD
THE 27TH SPACEX CARGO MISSION

7
00:00:24,457 --> 00:00:29,829
3D cultured cardiac muscle
tissues are returning to microgravity

8
00:00:29,829 --> 00:00:36,503
to help develop new therapies for
cardiac dysfunction on Earth.

9
00:00:36,503 --> 00:00:42,242
Radiotolerant organisms exposed to
the space environment could reveal clues

10
00:00:42,242 --> 00:00:48,214
to the survivability of these organisms in
space and the origins of life on Earth.

11

00:00:48,214 --> 00:00:54,187
Researchers are sending heart organoids
back to space to test drug combinations

12
00:00:54,187 --> 00:01:00,093
that may reduce microgravity-induced
changes in heart cell function.

13
00:01:00,093 --> 00:01:05,532
A student-manufactured project
will provide an easier way for

14
00:01:05,532 --> 00:01:11,805
astronauts to position video and still
cameras in the middle of a module.

15
00:01:11,805 --> 00:01:18,244
Astronauts will control liquids using capillary
forces over a range of liquid viscosities

16
00:01:18,244 --> 00:01:23,950
to inform the design of more efficient
carbon dioxide removal systems in space.

17
00:01:23,950 --> 00:01:30,390
Researchers continue to analyze
bacterial biofilm formation

18
00:01:30,390 --> 00:01:36,129
and the antimicrobial properties of
metal surfaces in microgravity.

19
00:01:36,129 --> 00:01:40,400
THESE EXPERIMENTS WILL JOIN THE
HUNDREDS OF ONGOING INVESTIGATIONS

20
00:01:40,400 --> 00:01:43,269
ABOARD THE
ORBITING LABORATORY.