COUNTDOWN TO MARS

TESSA FISHER

1
00:00:13,070 --> 00:00:18,000
Personally, most of my research isn't
necessarily directly related to the

2
00:00:18,000 --> 00:00:22,320
exploration that the Mars 2020
Perseverance rover is going to be doing.

3
00:00:22,320 --> 00:00:27,630
I mostly focus on exoplanets, planets
around other stars, you know, far beyond

4
00:00:27,630 --> 00:00:32,189
Mars or any other planet in our solar
system. But, with that said, some of the

5
00:00:32,189 --> 00:00:37,559
research I did earlier in my academic
career focused on subterranean

6
00:00:37,559 --> 00:00:41,930
environments on Mars, or
environments under the ice cap of Mars

7
00:00:41,930 --> 00:00:45,629
specifically looking at: could these
environments potentially have liquid

8
00:00:45,629 --> 00:00:50,850
water and maybe even life up to the
present day? And, one of the instruments

9
00:00:50,850 --> 00:00:55,710
on the Mars 2020 rover RIMFAX is a
ground-penetrating radar array that's

10
00:00:55,710 --> 00:01:00,899
specifically going to measure and look
for these sorts of wet, subterranean

11
00:01:00,900 --> 00:01:03,160
environments and I think that's really
exciting!

12
00:01:05,460 --> 00:01:08,360
Personally, what I think would probably
be the most exciting discovery

13
00:01:08,380 --> 00:01:14,660
would be something that comes out of one of the other instruments, SHERLOC, which is a Raman spectroscop

14
00:01:14,670 --> 00:01:19,170
instrument and then essentially what you
can use it to do is detect and identify

15
00:01:19,170 --> 00:01:26,130
a whole wide range of chemical compounds
including potentially organic ones so I

16
00:01:26,130 --> 00:01:29,119
think the most exciting thing that could
potentially come out would be

17
00:01:29,119 --> 00:01:33,840
identification of something like say DNA
or chlorophyll something that's really