#### **Alexandra Magold**

Good morning, Science. My name is Alexander Magold. It is a great pleasure to be talking to Antje Boetius today. She's a marine biologist and if her name rings a bell, it's because she's the person that discovered microbiotic anaerobic oxidation of methane. Her work on the concept that early life forms may have survived on methane may well pave the way to actively counteracting climate change in the future. I am thrilled that she's agreed to come on and talk about her passion as well as life in 2020.

#### **Prof. Antje Boetius**

My name is Antije Boetius, I'm the director of the Alfred Wegener Institute, Helmholtz Center for Polar and Marine Research. And these days I'm wondering about my life because I'm stuck with about 10, 11, 12 hours of video conferencing and some of them as nice situations as this one, a podcast or a journalist asking me what's your favorite moment and research?

#### **Prof. Antje Boetius**

And then I start dreaming and it takes me a split second and I can beam myself and to my really most favorite moments, which is diving into the ocean, entering a ship, starting to sail off for an expedition that would carry me to places, the remote environments that hardly anyone gets to see, like the polar seas, the deep sea under the ice, life in the abyss, microbial life that these days we humans think mostly about as causing diseases and pandemics.

#### **Prof. Antje Boetius**

But in reality, the whole world lives of the symbiotic network between us animals, plants and the microbes out there. And so I love about my job that while I'm very busy with science management very fastly, I can be myself into the process of research and to me, traveling, diving deep and being out at sea is my favorite time.

#### **Alexandra Magold**

Imagine somebody gave you all the means possible ever - all the people you needed, all the money, all the ships, what would be your dream project, no, no strings attached?

## Prof. Antje Boetius

If for my research, someone would fund me endless with endless amounts, I would start a mission to fulfill a dream I had when I was a child, I was reading Jules Vernes book, Captain Nemo, Twenty Thousand Leagues Under the Sea, and I imagine myself as an owner of a submersible that can go on with people on board, who want to understand life in the deep sea for weeks or months coming. Until today we can only dive for a very short time before we have to return to the surface.

## **Prof. Antje Boetius**

Until today, we cannot stay under the sea and observe. We can use robots but that's not the same thing. So that would be my favorite alternative rocket alternative International Space Station. I would plan a large submersible that allows me to visit the life that I care for.

## Alexandra Magold

That's really shocking. I didn't know that, so we've managed to get to the moon, but we can't actually stay down there for longer?

## **Prof. Antje Boetius**

No, just for a few hours.

#### **Alexandra Magold**

That's insane. To do, to do! What was the moment when you really felt it's not going to get any better than this ever? Or maybe that's still to come. I'm sorry.

## **Prof. Antje Boetius**

No, I mean that it had to. There are several levels. But one level is, of course, what one key level of the most amazing moments in my life as scientist has to do with discovery. It's this moment. It's this place, and you're in it and you are about to make a fantastic discovery. And I had a couple of those. It had to do with finding unknown microbes or it had to do with looking for a specific place in the deep sea and finally finding it.

#### **Prof. Antje Boetius**

And so these moments, these Heureka-moments belong to the most pleasurable moments I had.

#### **Prof. Antje Boetius**

There's also the other side, the societal side. So the moment when you get a prize, the moment when you complete a lecture to an audience and you feel in the room and it feels sometimes a bit like being a rock star. The way I imagine it, you have this full room of people and you feel in that room something has happened to the audience, maybe a hundred or a few thousands. And there's this amazing feeling that you've reached out by saying something about your research.

#### **Prof. Antje Boetius**

You've reached out and you have surprised people and they want more of you and of that.

# **Prof. Antje Boetius**

I love that moment.

## **Alexandra Magold**

Yeah. Yeah, absolutely. That's when when real change happens. It's one thing to find something new, but how much good does it if nobody knows about it? Right. If you are the only.

# **Prof. Antje Boetius**

Yeah, connectivity this connection I love that the most.

## **Alexandra Magold**

Vielen, vielen Dank.