**TEDx**PokrovkaStStudio

***Anastasia Stepanova «Give me space to dream»***

When I was a child the most interesting book for me was astronomy, the basic astronomy and I think it's the most magical fairy tale book, because when was reading the conditions on Jupiter or Saturn and imagining that the density of those planets actually the same as a water density or less. I imagine that we go there and just diving and swimming those planets. How crazy is that. And since then all my childhood I was reading science fiction books and that gave me this seed of ideal future where we have space exploration and we travel to different planets and I thought «ok» when I will be 25 definitely we will be living on Mars and on the moon. So, when I was 25, nothing happened like that unfortunately and I was just working as PR manager and journalist, but all the time the thought that I'm not living my life, in not following my part, was telling me, that I have to change what I'm doing. And all of a sudden I decided, that we live only once and we should do what we love, even though Society and everyone else can tell you «you're crazy». You should still follow your dream. So, I started to participate in different private space projects and Mars Society, is a non-profit organisation and president Robert Zubrin actually inspired many of us and he together with Mars Society built space stations, which simulate the conditions wish you see on Mars basically, it’s Mars space stations. One in Utah desert and another one in habitable island in Arctic. And just by the accident I met him in Moscow, he came all the way from America, to give his talk and then he opened up to me the opportunity to be in amazing project «Mars 160» where crew of six spends 3-months in Utah desert Mars desert Research Station, and 3-months in the arctic at flashlight Mars arctic Research Station. And we simulate that we landed on Mars and start to explore the planet first of all, of course, will be looking for Life on Mars. And that was our main goal apart from that with a different engineering and science projects and research and the most of all for me it was very important to understand that this is really my dream and this is what I really want to do, because when you just lay on the couch and think «ok» I will be perfect Matt Damon in the movie «The Martian» and it's totally another thing when you're actually on the conditions where you have limitations in everything and actually it was one of the best times in my life.

After that I came back to Moscow and decided to follow my dream even more so I actually start my second degree in engineering and was preparing myself to apply for cosmonaut squad here in Russia. And I started to work in institute of biomedical problems which is a leading organisation since 60s. That studies space medicine and space biology. And back in those days and 60s we had our first isolation experiment. It was secret and the three men spend one year in tiny space station in the middle of Moscow. And experiment was successful since then IBMB was doing different isolation experiment such as mars 500 and recently in 2019 they started experiment serious together with NASA and I was a crew member of this project. So we spent four months in a simulation of orbital moon station. No, with no sunlight 4 months, no internet and limitations in food, water supply and in your surroundings. And again that was also amazing experience for me and I understood that I would love to be even more cosmonaut, not only flying on iss but actually going to the moon or even to the Mars. Of course that's really crazy dream, but I'm hoping that in my lifetime I can see that. And when this experiment finished I continue to work in IBMB as an engineer at the station that we have there. And actually making sure that we can do everything possible for humans to live. Not only safely but also comfortable in a space station. And after that my love for being in experiments in being elaborate, but in a good way continued and another experiment that we had in IBMB called dry immersion which is basically a simulation of negative effects of microgravity. Dry immersion is a big bath filled with water and covered with waterproof foil and their tests subject lay in this bath for several days. And in 50 years of this experiment never they head female test subject and for me this was actually crazy. So fortunately in October 2020 they started the first series of dry immersion experiments with female and I was the first test subject in the world. And we had only 3 days dry immersion so I stayed in this bus for 3 days and I understood that our body adapting to extreme conditions or two different conditions so fast. And even in the first day already had changes in my body. So, I lost a lot of liquid around two-and-a-half litres and I know my spine stretched so much so I actually grew one centimetre and half and there is many other different and occasional reactions in my body and that I couldn't control and for me it was really fascinating and now we're still examining. What is happening and how is different with female and male human body in microgravity. So, I think it's crucial to study more because if you go to Mars for sure that one be only male astronauts we will go there together.

And why I'm saying all that 7 years ago. I was just ordinary PR manager and journalist and who was dreaming about space future and now after 7 years I'm a test subject and mission specialist in many amazing projects and I'm already engineer I’m a rescuer and ambassador of charity space projects and it's not it's only the beginning and it's not the final court, so if you're still hesitant of changing your life. Don't be because we wants and we need to follow our dreams, because if you follow your dream the world around us will be much better.