

# WOMEN & GIRLS IN SCIENCE

USB Faculty of Fisheries and Protection of Waters



## M.Sc. Tatyana Gebauer, Ph.D.

### Why have you chosen the path of science?

You will be surprised, but it was quite the opposite, my profession chose me. I grew up in Kazakhstan, in a country where you have to pay for higher education unless you pass the entrance exam with a high average score on your secondary school final exam in which case you can apply for a scholarship and get a grant for education free of charge.

There are ten grants for one specialisation, 10 places were given for one specialisation for students from all over the country. I remember that my mother came to me in the final year of high school and said: 'Honey, you have two choices, either get a high score to get a grant, or go to work because we don't have money to pay for your education. The choice is yours.' I was working hard that whole year, I passed the exam, got a score with which I went to apply for admission to one of the best universities in our country.

When applying, I had the opportunity to indicate the four specialisations in which I would like to receive a grant. I chose biotechnology, biology, pedagogy, and the last section remained empty. I did not know what to put there because I strongly wanted to become a biotechnologist. No compromises. So I told to myself let's have a little fun... And I chose fishery as the fourth specialisation. And what do you think... I did not get a grant for biotechnology, or biology and pedagogy either, but I received the 6th grant for the fishery specialisation. The fishery chose me and it's been 11 years and I'm still here.

### Have you encountered any difficulties in your scientific career caused by the fact that you are a woman?

You know, I have heard a lot of stories in which women said that they were not able to achieve something because they are women. I can't speak for them. I can only speak for my opinion and experience. And if you ask me if I have faced any difficulties in my scientific career because I am a woman, I will tell you that I have not. I have had many failures and even more tears, but all of them were due to the fact that I was not prepared enough, that I was lazy and cowardly to do something.

I did not make my own decisions, that I looked at the people around me to the left and right wondering what they think of me and my behaviour, and that the worst thing is that I believed a person who said I wasn't good enough for anything. I constantly made excuses for myself, and in the end, I did not know who I was, what I wanted, what I dreamed about. You know, Hieronymus Bosch painted a picture of a ship of fools, there is one character who sits in a green suit, in a ship that has stopped without direction, he drinks from a bowl and looks at the water deep in thought. In difficult moments, he always reminds me that I am on a ship with no direction because I am following but not leading myself in my own direction. I fail because I lose the certainty of my own thoughts.

## *Do you think that the position of women and their role in the world of science still needs to be highlighted nowadays?*

To rephrase your question, is there a place for a woman in the world and science as its part? Honestly, for me, it's like highlighting that a woman needs to eat, drink, breathe.

To answer this question, we have to look into the past because the past is our genetic memory, our genetic experience passing through generations. Just look: in the time of the great Shakespeare, only men were allowed to play female roles in the theatre, but in 1660 women broke the rules, they began to play! Elizabeth I, Queen of England, everyone tried to marry her off because it wasn't right that she would rule England as a woman by herself. She broke the rules, refused to marry and became one of the great rulers. The same applies to professional artistic activity – in a book written in the 16th century by the great Vasari about 100 great artists, 13 of whom were women.

The 16th century, a time when art was not the craft of women, and yet they ended up in this book! And the same goes for literature, George Sand, the Bronte sisters, George Eliot, they all wrote under a male pseudonym, but they wrote! Regardless. And try to say that Marie Curie or Ada Lovelace, Rosalind Franklin that they have no place in science? It is therefore pointless to highlight that there is a place for a woman in everything, including science. History has done this for me. All these women had a purpose, they broke the rules, they were outside predictability!

## **What would you like to tell women scientists and all girls and women thinking about a career in science?**

Use the lessons of history and apply them in your daily life, use your past as an instrument of your trade. Because you are a part of this historical experience or continuum. You are not alone. Develop your ability to grow.

I know we all going to suffer difficult times. But please, acknowledge all your failures, imbalance, crises, falls and suffering, learn from them and move forward. Have this conviction that you are brilliant, you are authentic, and you are outside predictability!