

Stories of inspiring women in STEAM:

**Zita Martins**

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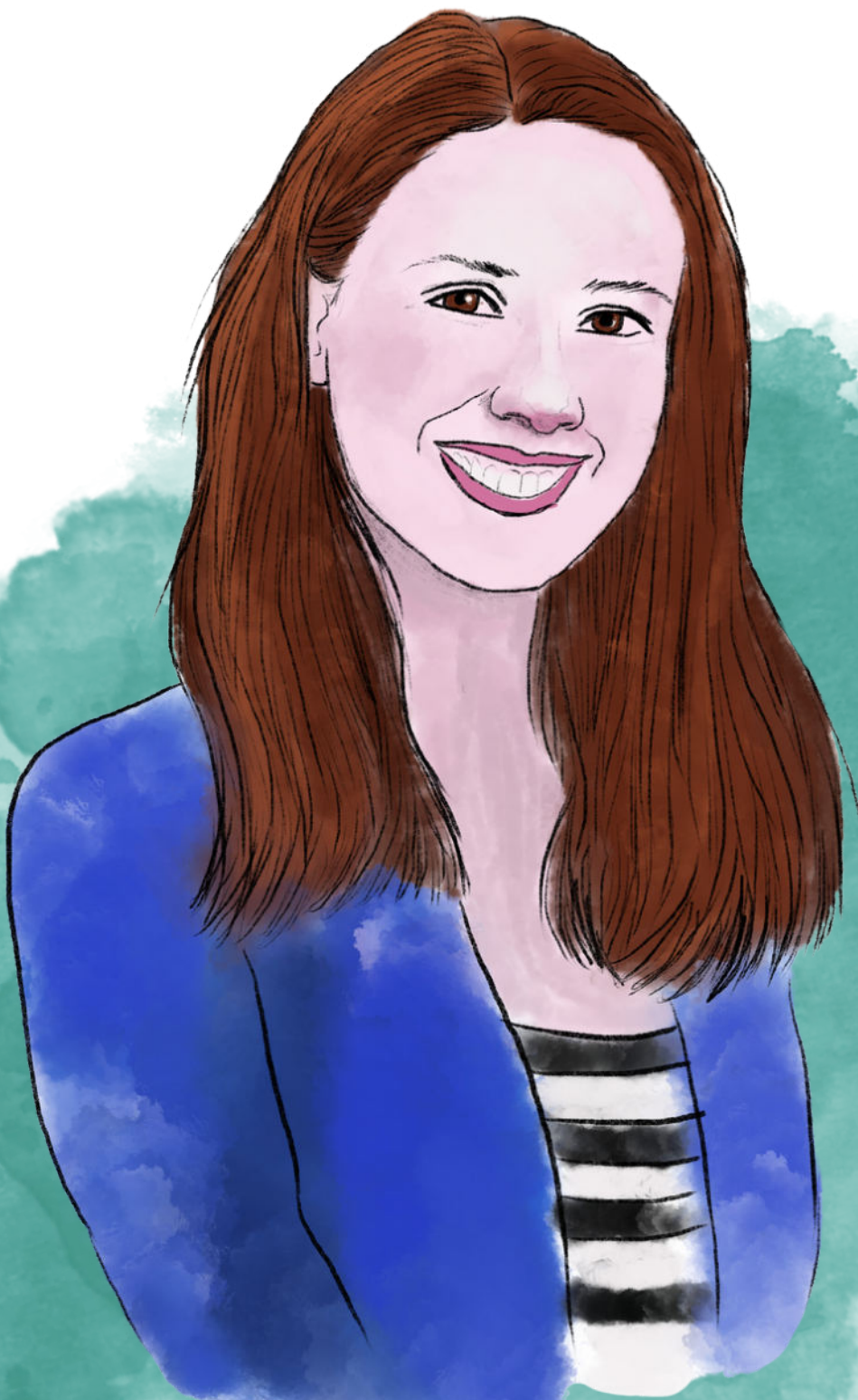
GoINNO (Slovenia)

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# **Zita, the scientist who searched for life in pieces of the Universe**





# A curious child

Once upon a time, there was a very smiley little girl with beautiful long straight brown hair called Zita. Zita was the youngest of three siblings, and she was an energetic and adventurous little girl who got the whole family moving.

Zita loved to twirl and twirl, especially in the colourful garden full of flowers and trees that surrounded her house. When she danced, she looked like a shining star, a little piece of the universe that moved beautifully and harmoniously.

At home, Zita liked to sit on the sofa and watch television. She wanted to spend hours watching programmes about the stars, the Universe, animals, plants, and the most diverse forms of life.





### **Question for children:**

**Does Zita remind you of anyone who likes to dance and watch TV programmes?**

Zita, with her honey-coloured eyes, was always attentive to everything around her. As soon as autumn arrived, she would go to the garden, walking on tiptoe like a ballerina, and bring back little leaves that she found lying on the ground. Very curious, she would challenge her brother and sister to play with the magic magnifying glass and find out more about plant life through their leaves.

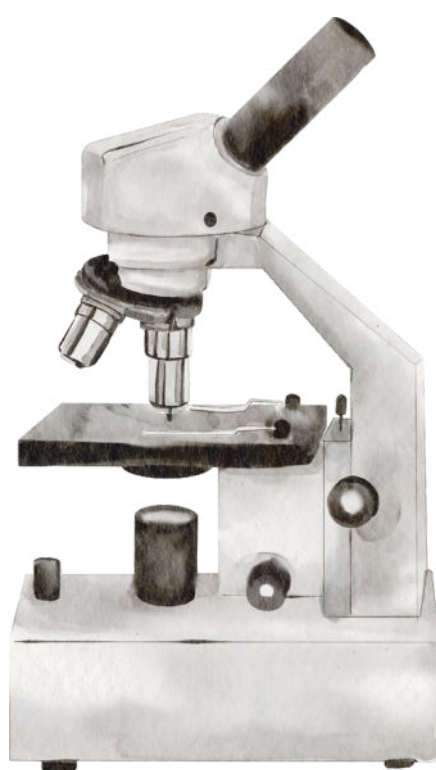
This magic magnifying glass allowed Zita to see very, very small things that she couldn't see with her sparkling eyes, it allowed her to discover other small worlds within our world. We call this magic magnifying glass a microscope. Zita was lucky to see life in detail through her family's microscope!





As time went by, the more programmes about stars and the Universe she watched, the more enchanted she became and every night she would look up at the sky before going to sleep and dream about the stars out there in the Universe.

And so, she grew up, being spoilt by her brother and sister, dancing until she lost her breath, playing with the **microscope**, and looking up at the sky with her eyes shining as brightly as the stars she admired.



# The decision of a life

As Zita grew older, various questions began to pop into her head. "Is there life in the Universe? Could I put little pieces of the Universe under the lens of a microscope and discover a whole new world?"

The more Zita thought about it, the more curious she became about the possibility of being able to see a little piece of the Universe through her magic magnifying glass. With her curiosity increasingly piqued about discovering space, Zita decided to turn her childhood dream into her adult profession. She decided to study life in the stars of the Universe, she wanted to become an astrobiologist. So, what is an astrobiologist? An astrobiologist is a scientist who analyses the Universe and life invisible to our eyes. She was determined to get ahead! So, she searched and searched for a way to do it and fulfil her childhood dream... but do you know what happened? She couldn't find any way to do it in Portugal.



## **Question for children:**

**What did Zita do at that moment?**

**It seemed that she couldn't follow her childhood dream after all... she couldn't be a scientist and study life in the Universe.**

# Indecision about the future



## **Explanation for children:**

But now I'm asking: "What do you do when you see a wall in front of you and you need to see what's on the other side?"

You climb the wall and look down from above, right?



## **Question for children:**

For Zita that meant leaving her family and friends behind to follow her dream.

**Will she be able to do it?**

**The days went by, and Zita was still very indecisive.**

She thought about asking for help and seeking opinions from five American scientists who worked with space daily. They all encouraged her to leave Portugal and go to another country where there were pieces of the Universe that she wanted to see and touch so much.





# Chasing a dream

Her choice seemed difficult. Zita had to decide between staying here, in Portugal, in a country where she would never be who she wanted to be and would never see and touch her little piece of the Universe, or facing the fear of starting a new challenge alone and being the first woman, the first-ever, to do it. Could a woman be the first to bring a new area of science to Portugal? After thinking it over, Zita chose: she wanted to set off on her adventure so that she could return to Portugal with all her knowledge and inspire more little girls to have their adventures in science.



**Question for children:**

**But what will happen?**

**Boys are usually the first to do something, right?**

Let's discover the journey of our adventurous Zita.

Zita then left for the country where she could touch the little pieces of the Universe. She was a young girl who now had the chance to pick up a little piece of rock that had travelled through space and see if there was life in that little piece of the Universe, that life you can see under a microscope. Every day was full of challenges and every day, Zita felt like she was dancing on her tiptoes on a stage, with lots of people watching.

### Explanation for children:



She was afraid. But afraid of what? Afraid of failing. We're all afraid of something; she was afraid of failing in her work, of not being able to find life in the little pieces of the Universe, a life so tiny that our eyes couldn't see it, or that there was no tiny life inside...

But every day she woke up excited to learn more and more and to look for life in her little pieces of the Universe.



# Resilience of a scientist

On one of her days at work analysing a little piece of her rocks from the Universe, Zita discovered something special - the life she had been looking for!

**Zita's enthusiasm was immense, and she couldn't stop smiling.**

(excitement and happiness) She wanted to share what she had just discovered with the other scientists. So, she immediately prepared a little box with her little piece of rock from the Universe and her results observed under the microscope and sent it to her scientist friends working in various places around the world. And why send the little piece of rock from the Universe to his friends? Because science is built with the work and help of many, many people. Scientists are people like you and me, who love science!

Unfortunately, the box got lost on its way and never reached Zita's scientist friends.



**Question for children:**

**And now, has she given up?**

**All that work and she's lost her great discovery.**





Zita, despite her discouragement at having lost something so special, managed to maintain her willpower and passion. She didn't give up and took another piece of the same rock and did all her work again to find life, the tiny life that she now knew existed.

**This time, Zita was successful in finding life** and the new little box she sent to her friends didn't get lost. What a relief! She was able to discover something truly amazing and introduce first to her scientist friends and then to the whole world the existence of life in little pieces of the Universe.



# An outstanding discovery in Astrobiology

She was very happy: she was in a new country, she had new friends, she could eat new things, and visit other places, but above all, she could discover a new world before her honey-coloured eyes.

With the help of her **microscope**, she **discovered the life in the Universe** that she had dreamed of since she was a little girl, a discovery that changed the knowledge of this area of science - **astrobiology** - and helped to develop science worldwide.



# A Barbie scientist

Zita thus became a very well-known and important scientist in the world of science, winning many prizes. Amongst them, there was one that she was very happy to receive.



## **Question for children:**

**Before I tell you what it was, here's a question - could this very successful scientist, discovering a whole new world in her laboratory, also be a Barbie?**

She can and she is! Zita has her own Barbie that she adores. A scientist Barbie, with straight brown hair, a white lab coat, glasses, and lab equipment, but at the end of the day she takes off her lab coat and is a very beautiful and elegant woman, ready to hang out with her friends and go for a walk.





# Decision for a future



## **Question for children:**

By now, Zita already has a lot of knowledge, she's already a famous scientist... And remember how she wanted to leave Portugal to discover new things and then bring those discoveries back to her country? Will she do it now that she has what she needs?

Zita has made many new friends in the countries she's traveled through, has a very good job, and is a famous and respected scientist. At this point, in Portugal, her field of work, astrobiology, didn't yet exist.

# Returning home



## Question for children:

Does she have the courage to take on a new challenge and create something in her country, giving up what she had in her job?

Zita is very brave and has returned to Portugal! She came back to her old friends and her family with a huge desire and enthusiasm to bring astrobiology to Portugal and enable more girls and boys who want to be scientists to see and touch little pieces of the Universe. **This was her childhood dream!**

Zita returned to Portugal ten years after starting her adventure, with a lot of knowledge, a lot of joy, and the desire to create research laboratories for little pieces of the Universe in this small country. Zita is the first woman and the first ever to bring the study of little pieces of the Universe to Portugal.

**Thank you, Zita, now we can dream and touch the Universe!**





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