

DISCOVER ?

various Science Communication
Careers at Esplora



GOVERNMENT
OF MALTA

MINISTRY FOR EDUCATION,
SPORT, YOUTH, RESEARCH
AND INNOVATION
PARLIAMENTARY SECRETARIAT
FOR YOUTH, RESEARCH
AND INNOVATION



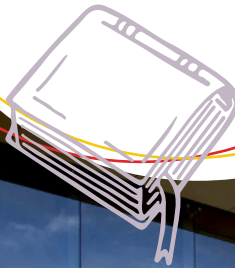


Introduction



Welcome to Esplora Interactive Science Centre

On the 26th of October 2016 Esplora opened its doors as Malta's first Interactive Science Centre. Over 200 exhibits are housed in the main exhibition halls and landscaped gardens, making this science centre fun, and engaging to all age groups. In addition, there is an exciting Activity Centre where visitors can engage in hands-on workshops and watch fun science shows, bringing science closer to society and narrowing the gap between the science and human worlds.



WELCOME
explore
think
imagine

esplora





In line with this, Esplora encourages visitors to **EXPLORE, THINK, IMAGINE, APPRECIATE,** and **CREATE.**



EXPLORE By implementing an inquiry-based learning approach, science activities are portrayed as entertaining, inquisitive, relevant, interactive, and engaging.

THINK Through the presentation of science as a stimulating, dynamic and continuous process, visitors are invited to observe and discover how true this is.

IMAGINE Engaging visitors in science by stimulating their imagination and enhancing their understanding of scientific concepts.



APPRECIATE Science is constantly evolving and shaping the world. Making the audience aware of the constant and rapid advancements in the various fields of science fosters a deeper appreciation of science and how it improves peoples' lives.

CREATE The development of activities which embrace the Arts as well as tinkering (i.e. making and exploring through trial and improvement) helps create a culture of scientific enthusiasm. In order to pursue a more comprehensive approach to Science, Technology, Engineering, and Mathematics (STEM) learning on a national level, Esplora Science Centre collaborates closely with other partners and working groups, such as the STEM Engagement Working Group. Finally, Esplora works to break stereotypes about science professionals through initiatives like the Erasmus+ RAISE project.





Get to know our staff



At Explora there are various people coming from several STEM fields. This diversity encourages innovation and creativity in our activities and events which aim to instill a culture of scientific curiosity.





...ursing's career in science that
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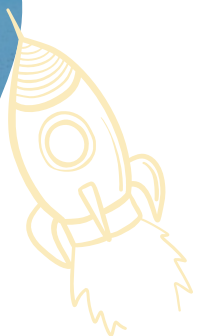


NATIONAL STEM

explora

"Your dreams and the path that you need to take to see them realized. If you do not succeed at this point, you will be able to find other ways to reach your goals. The best way to get to know the person you are looking for is to have a conversation with them and find out what they are doing and how they are doing it."

WALINDO POLYMERITS
Quality Control & Laboratory Analyst
WALINDO POLYMERITS S.A.S. CO





Interview with **Sarah Ghose Roy**

Executive Science Communicator

Can you describe what a typical day looks like at your place of work?

As a Science Communicator my day is filled with science shows and workshop outputs. This means that I am responsible for preparing the necessary resources such as chemicals, equipment and setting them up according to the set up required for that specific output. My colleagues and I are scheduled to deliver the output, clear up and reset once the output is complete. Every output tackles a different branch of science. Hence, a certain amount of time is dedicated to researching these different branches. Since Explora does not focus on one specific branch of science I am free to investigate whatever interests me.




Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

There are instances when the work is stressful, but it is all worth it when someone says thank you, that they have enjoyed the show and learnt something today. Nothing compares to the feeling that you get from being appreciated.

What is your message for schoolchildren when it comes to STEM subjects?

As much as possible one should always follow one's passions. Science is all around us and forms part of our daily lives. I have always found that it was easier for me to learn something if I found it interesting. When it comes to STEM subjects there are many online resources that present STEM subjects in





an artistic manner. I have always found these forms of science communication to be very helpful. Our brains work in different ways and what works for me might not work for you. If you are finding a particular work concept or science subject difficult, try to look for alternative ways of communication. Sometimes notes on a whiteboard are not very engaging, but an online science video that uses puppets is.



What inspired you to choose this career?

In science, communication is key. One's research is worthless if it cannot be communicated effectively. Science communication allows for collaboration and appreciation of one's efforts. I chose this career to share my love for science.

Most of the science and research that is carried out in Malta is very formal and academic. Science museums and science events are a great way to demystify scientific research by making it more accessible to the public.

Who/what has influenced you the most in your career choices?

I have always been driven by my love for science. At a young age I fell in love with biology and pursued it at a Masters Level. Throughout my formal education I was always drawn to the teachers and lecturers who could engage students. One in particular had a wonderful way of captivating students and keeping us engaged. This ability heavily influenced my choices to pursue my current career.





Interview with
Benedek Forro

Executive Duty Manager

Can you describe what a typical day looks like at your place of work?

As a duty manager I am responsible to make sure that on days when we are open to the public the science centre is ready to welcome visitors, ensuring the best possible interactive experience at Explora. Half of my job is customer-care oriented, and the other half focuses on operations, let it be the day-to-day overseeing that our science shows, planetarium films are running smoothly or communicating with the whole team at the centre so we can make sure that our visitors will have a safe and fun day interacting with our numerous exhibits.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

Having the opportunity to work at Explora gives me a chance to interact and collaborate with like-minded people. We have so many different people here with such diverse backgrounds and disciplines, that whatever you might think of there will be a person with knowledge and skills to help you out or to just have a light-hearted intellectual exchange during lunchbreak. Working at a science centre also gives me a chance to pursue my personal interests that are not strictly related to my job. Right now, I am running a long-term experiment analysing how



various species of plants react to and grow in soils that mimic Martian or Lunar soils as opposed to Earth soil.



What is your message for schoolchildren when it comes to STEM subjects?

In my opinion studying STEM subjects is a bit like being a private detective in a novel. You learn to look behind the surfaces and find out how things work and why are they the way they are. STEM education is aimed to develop logical reasoning, research questioning and problem solving, which are skills that allow for independent thinking and help to respond to challenges, whether on a global scale or even in one's personal life. STEM subjects will widen your horizon of the world around you and will empower you with practical skills and knowledge that can be applied on daily basis to improve the world and our quality of life.

What inspired you to choose this career?

I had many different careers in the past, but I always tended to gravitate towards education or entertainment. I enjoy sharing knowledge and see people grow and improve. Explora is simply the best institute in my opinion

to make this happen. Our goal here is not only to educate but also to inspire, spark, and foster interest in science in a fun way. Given my background this is simply just the perfect combination for me.



Who/what has influenced you the most in your career choices?

I cannot single out just one specific person who was the most influential in my career path. I had several teachers, mentors, colleagues, and friends who supported, guided, and helped me and without whom I would not be half the person I am today. I was also lucky enough to grow up in a family that had put a lot of emphasis on the value of learning and encouraged me to explore and try out new things. Therefore, when it came to career choices, I had the liberty and support to try out different things at University without the need to stick to a rigid choice.



My advice would be not to put such unnecessary pressure on making 'the perfect choice'. Rather make a choice that you are comfortable with and commit to it. Apply yourself to the best of your ability and immerse yourself in it. Your career is not something inflexible. You will grow and improve with each step so best to start the journey with an open mind and a keen attitude, and the rest will follow.







Interview with **Sabrina Borg**

Explainer

Can you describe what a typical day looks like at your place of work?




A day as an Esplora explainer, in my case, starts early. I check my e-mails before I leave home just to update myself and make sure I do not forget anything. I arrive at Esplora and continue the tasks that I did not manage to finish the day before. During the week, at 9:00am we all head to briefing where all the visitor facing staff meets and discusses the logistics of the upcoming day. Usually we get time allocations, this means we are not in the same gallery for a whole day, but we go to and from galleries every hour. Apart from the floors, we are sent to help the presenters in their live shows, and we even get to help at the Planetarium sometimes.



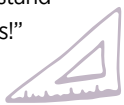
During the weekends, we start a bit later, briefing is at 10:00am. In my opinion, the weekends are more exciting because we get a wider range of age groups, so we get the chance to speak and explain in many different levels of education, which is challenging sometimes but who does not like a challenge?

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

I was stationed to cover Ground and was walking in the Motion Gallery. The group of 3, an elderly married couple and the



wife's brother, were observing the exhibit of the gold crown, they looked hesitant to do anything, so I approached them. I explained the legend of Archimedes and the story of the gold crown, I saw how interested they were in the story, so I started to explain in deeper detail about how the gold was measured and how the displacement of the water was working. They loved the explanation and the methods behind this, so we kept on discussing. It was not until a few minutes later that the woman's husband told me that he was an actual goldsmith in Msida before he retired and that he knew exactly how the exhibit worked, not only that but he used the exact same method to check the stock he used to buy for his work. In utter shock my face turned red, and I just stated, "well I hope I didn't get any facts wrong, that would be very embarrassing!". With a lot of grace, he smiled and said, "you were very nice to explain the entire process to me and my family. I might have known the process, but they didn't, so it was very kind of you to explain in the way you did. I never would have been able to make them understand the process, I've been trying for years!"





$E=mc^2$

They asked if I could explain a few more exhibits to them, and obviously, I said yes, until I had to go to another Gallery. At the end of my shift, I returned my Explora phone, and met them at reception again, the woman just smiled at me and said, “Well, we started the day with you, it’s only fair we end our day saying bye to you as well! Thank you for not giving up on three old folks like us.”

knew I wanted to pursue a career in these fields. Explora gave me the opportunity to do all the things I love - under one roof. Being an Explainer allows me to talk to as many people as I want, it lets me inspire and help people understand the science of how the world works, which was something I used to do anyways to anyone who would listen to me.



What is your message for schoolchildren when it comes to STEM subjects?

STEM is more than one subject, and I remember when I used to hear STEM as a student I used to fear the word since I did not fully understand it at the time. Today, my advice would be this; do not be afraid to look at different Science, Technology, Engineering, and Mathematics subjects, you do not have to be a genius in all fields. You can choose the section you relate with most, study that and then all the other fields will help in what you choose. Do not be afraid to try the different fields. There are many opportunities in these fields which one might not relate with from the get-go but believe me, if you find the fun in the subjects, it will be a piece of cake... and who doesn't love cake?



Who/what has influenced you the most in your career choices?

In-Nanna Ġuża (Granny Ġuża)! She never received any education herself; she only knows how to write her name. Her only job was a farmer in her dad’s field before she got married. The rest of my family, including my grandpa, all have hospital-related careers and as a child I thought that this was what I was supposed to do as well.



She always wanted me to look outside the box of expectations the rest of my family set. She always knew deep down that I would be too empathic for a job within a hospital, so she showed me many other opportunities. She taught me all she could, and she exposed me to as many skills as she physically could until her dementia took over her.



What inspired you to choose this career?

I was always a very social person; I love interacting with different people and getting to know them. Growing up, Science and Art always interested me, and I always

When I saw the opening post at Explora and got the job, I went to tell her - even though I knew she would never remember. To this day, when I arrive home, I go by her side to tell her I’m back from work. On rare days, she replies “Explora is much more fun than the hospital isn’t it”.





Interview with
Roxanne Mangion
STEM Engagement Officer

Can you describe what a typical day looks like at your place of work?

A typical day from the life of a STEM Engagement Officer involves doing research on any upcoming projects and events, liaising with the other members of the team and the projects leader, and collaborating with external stakeholders to gather further information and feedback. The research found is used as supporting evidence for any projects under the responsibility of the team. As part of the STEM Engagement Team, I am involved in the planning and dissemination of the STEM Career Expo that is held every year, the STEM Awards with the first edition being held this year, and School STEM Competitions.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

Currently, I am working in direct collaboration with Aġenzija Żgħażaġh, the National Youth Agency of Malta, to settle a science youth café as part of our first ever Science Festival entitled “Esperimenta Tikka Xjenza”. On one of our sessions, the youth participants had to come up with an idea of an activity that would interest them during the session. The majority confessed that they would like to develop something related to sports but, little did they know how much science is involved in sports. I will never forget their facial expressions when I was explaining the science behind football, table soccer, athletics, cycling, and dancing. The



youngsters were so engaged that they did not want us to leave. They posed a lot of questions, indicating that they were intrigued by the discussion and curious to know more about the science behind the sports that they practised everyday and its direct effect on their mental and physical wellbeing.



What is your message for schoolchildren when it comes to STEM subjects?

Being a woman, I always found people who discouraged me from pursuing a career in Science, Technology, Engineering, and Mathematics. However, this did not stop me from pursuing a career in STEM. Hence, my message to you is that you should always follow your dreams and do what makes you happy and satisfied. Seek new opportunities that will help you grow and that you could learn from. This way, you will always enhance your knowledge and skills that are the key to success and to making a difference in other's lives.



What inspired you to choose this career?

My main inspiration was my secondary school biology teacher who always believed in my potential and gave me the ownership for my own learning. Her ability to connect biological phenomena to different aspects from real-life and her

student-centred approach all continued to increase my passion in science.

After I received my O Level results, I wanted to further my studies within science education in order to follow in my teacher's footsteps and become a biology teacher. I did achieve that goal and today I am a graduate teacher in science with a specialisation in Biology. However, I wanted a job that allows me to teach the wider audience and not just secondary school students who choose biology. I wanted to inspire more people in science and here I am today!



Who/what has influenced you the most in your career choices?

My father has left a positive influence on my career choice. When he was younger, he used to work in graphic design and limestone design, and I was always intrigued by the precision, mathematical calculations, art, and graphics. Since then, I was already understanding the direct link that exists between science and the arts and how much science is significant to our lives. When I grew up and had to choose my subject of specialisation, my parents were both of the opinion that I should choose a subject that I am passionate about and that has an impact on Malta's economy and employability and what subjects would be more suited for this than STEM subjects?





Interview with Des Cini

Executive Programme Developer

Can you describe what a typical day looks like at your place of work?

My typical day is usually a busy day full of different tasks. I kick off with a coffee whilst I go over my emails, then proceed to forming a daily to do list and tackle off the daily tasks. Usually, I tend to focus on an ongoing project by communicating with partners from other organisations, doing some trials of an education output that is being developed such as experiments or demonstrations for science shows, and attending to a programme development meeting or two. Obviously, the day involves constant communication with colleagues from different teams to

provide the best quality output possible since teamwork is very essential.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

My job involves continuous training and learning and many experiences, some of which are held abroad in different science centres. All of which have been great experiences with my colleagues especially the ones in Glasgow Science Centre and Heureka in Finland. Attending to the Ecsite annual conference in Copenhagen was a great learning experience too, since it helped me extend my professional network.



What is your message for schoolchildren when it comes to STEM subjects?

STEM subjects were always a favourite when I was in school and still are. I liked learning about different things especially subjects that relate to daily life such as Geography, Biology and Physics. Curiosities within my life always kept me interested in learning more. Today I still refer to them when I create something new at Esplora. I feel that STEM strengthens my creative side in science communication by explaining concepts in a fun and unique way.

What inspired you to choose this career?

When I learned that a new centre is opening by the name 'Esplora' I was

immediately interested to learn what it will be about. I had recently graduated from University and was looking for a job that allowed me to be creative. I immediately asked for more information and applied. I never regret doing that!



Who/what has influenced you the most in your career choices?

I would say that my parents were always pushing me towards success and always supported my decisions. They never pushed me in becoming someone I did not want to become, but, instead, made sure that I followed my dreams, and being happy at the same time, regardless of what I work on.





Interview with **Giselle Calleja**

Senior Executive Public Relations

Can you describe what a typical day looks like at your place of work?

It is very dynamic. No day is like the other. It is fast pacing and it is changing ever so quickly. However this is what makes it so exciting as I get to work with so many different and influential people. It can get a bit stressful as well, however through multitasking and good management I am able to cope with it.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

I consider myself to be fortunate enough to have been able to, together with our Executive Chairman, Dr Jeffrey Pullicino Orlando, present Esplora Interactive Science Centre project, one year prior to its opening, to Her Excellency Queen

Elisabeth II, when she visited Malta in November 2015.

What is your message for schoolchildren when it comes to STEM subjects?

STEM subjects are crucial for us to understand and make a difference in the world around us. Taking up STEM subjects will help you acquire the 21st century skills much needed to tackle the tough problems the world is currently facing. STEM subjects are known to help us **think critically**, this will enable you to navigate through life without having to use a textbook with answers written on it. Science, Technology, Engineering and Mathematics also help us in becoming **creative** beings. How cool is that!

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What inspired you to choose this career?

Public Relations is essentially about communicating and building relationships. I believe I have always had a natural flair in connecting with people, the right skills and attributes for this career, so I guess the choice came naturally. PR is also about understanding brands and recounting good stories, Something in which I am very passionate about.

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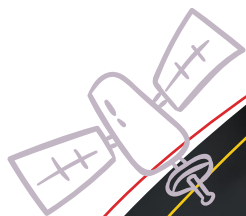
I have always aspired to have a career in Communications and graduated with B.A. Hons. Communications from the University of Malta. From then, I started working in Journalism, Television

Production and worked my way. I joined the Malta Council for Science and Technology at the inception of the Esplora Interactive Science Centre project concept phase and have been working in promoting the Centre ever since.



Who/what has influenced you the most in your career choices?

Growing up I was always involved in the Arts. I started dancing ballet and other dance disciplines at 3 years of age and had a long career in dance. Through performances, travel, networking etc, I was exposed to the media world. I also owe a debt of gratitude to my mum.





Interview with **Maria Farrugia**

Executive Erasmus Funds Projects Manager

Can you describe what a typical day looks like at your place of work?

My work, although situated in an office setting, does still provide me with the opportunity to interact and get to know various people, even foreigners. This is facilitated through the use of technology, via emails, phone calls and online meetings. A typical workday is characterized by various tasks, mainly going through my emails, meeting our project partners to update each other on the project's outputs, developing new concepts in Erasmus+ projects, and organizing STEM- related events to be enjoyed by our visitors. Other than this, I get the opportunity to assist other

teams from within the Education team at Explora. Throughout my duties, this allows me to communicate with several people coming from all over Europe, forming part of various STEM related entities and organizations, creating a network whilst also collaborating with them for future collaborations.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

One experience which I will always remember occurred throughout one of the training events which took place in Czech Republic relating to outdoor education. One of the activities was a



treasure hunt which involved trekking and searching for various items throughout our journey to the final destination. Whilst our group was competing with other teams, we wanted to arrive as early as possible so that we could be the winning team. Instead of following the road, we decided to take a short cut and took a rather different path with forest terrain. All of a sudden amidst the silence, we heard the sound of something coming from behind us at a very fast pace. We all stopped and suddenly, a deer sprinted past us. It was such a unique experience, and we were all amazed at the speed of such a delicate creature.

What is your message for schoolchildren when it comes to STEM subjects?

STEM is such a vast field, and many would not think that they would find anything which would engage them. However, if one explores and gets to know more on their favorite topics or hobbies, one might be surprised and discover that there is a relation between their interest and STEM subjects. My message is to never stop exploring and learning, and to follow your passions and be as creative and innovative as possible, so as to create something of your own.

What inspired you to choose this career?

I have always wanted to have a role where I can interact with different people, whilst working in an educational environment. Adding to this, my studies which are related to Earth Science, supported me throughout my career at Esplora. I have started my career at Esplora as an explainer, which gave me a great sense of satisfaction to be able to share and transfer my interests in STEM subjects to the youth. Later on, I was able to apply for a different role within the education team at Esplora, which I am grateful for, and through this I get to contribute to several Erasmus+ Project with various local and foreign institutions.

H₂O

Who/what has influenced you the most in your career choices?

Whilst I always followed my interests, I would have not been able to achieve any of this without the support given by my parents. I do believe that with their support provided throughout my studies, I was able to make the right choices which led me to where I am now.





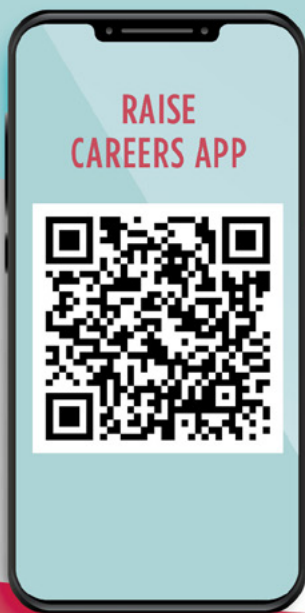
THE NEW RAISE APP

Download Now and Access the New Application

The Raising Awareness in STEAM Employment project (RAISE)

addresses the skills mismatch and surplus being observed around Europe because of changes within the employment sector and aims to create awareness and interest in STEAM employment.

SCAN THE BELOW CODES TO DISCOVER MORE



RAISE
CAREERS APP



THE RAISE
PROJECT WEBSITE



SEVERAL OPEN EDUCATION RESOURCES

were developed as part of the project, which are freely available for educators and science communicators to download and use with their respective students and visitors.

Explore various STEAM Careers and related educational activities ideal for children from 4 to 18 years old.

Science Technology Engineering Art Mathematics



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RAISE

Raising awareness and interest in STEAM Employment
Project No. 2017-1-M101-KA202-026978



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