

International Day of Women and Girls in Science. Two interviews with Kathy Christoforou and Maria Girone.

In 2015, the United Nations General Assembly declared February 11 as the International Day of Women and Girls in Science. The goal is to achieve full and equal access to and participation of women and girls in science and to further advance gender equality and the empowerment of women and girls. As part of this day, we would like to feature two of our team members in RAISE.

Kathy Christoforou, scientific coordinator at the Computation-based Science and Technology Research Centre of the Cyprus Institute (CYI) and Maria Girone who works at the European Laboratory for Particle Physics (CERN) as the Chief Technology Officer of CERN openlab. We asked both of them a few questions regarding their scientific work, what experiences they have gained so far and what they would like to share with young girls and women who are interested in science.

So, let's get started.



Hi Kathy, please introduce yourself briefly to the readers.

Hi there, my name is Kathy Christoforou. I was born and bred in South Africa. I completed my Bachelor of Science, Honor's and Master's degrees at the University of the Witwatersrand in South Africa, majoring in Chemistry. My love for science led me to the University of Cambridge where, on a full scholarship, I embarked on a PhD in the Spring Research Group, an organic chemistry group that deals primarily with applications in the medical field. Now, I work as a scientific coordinator at the Computation-based Science and Technology Research Centre of the Cyprus Institute.

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When did you realize that you wanted to make a career in science and what was the incentive?

I'm not sure, to be honest. I remember really enjoying science at school and really excelling in it - it just "clicked"! Then things just followed their "natural" path - I decided to pursue science at the university level. This is when I really felt "in my element" and I really loved my undergraduate and postgraduate studies! I also had supportive parents who gently encouraged me on this path – this is invaluable.

What makes science work so special?

The challenge. And being able to directly impact people's lives.

What is your role in the CoE RAISE project and how do you like it so far?

The Cyprus Institute is a partner in CoE RAISE. I help with the general administrative tasks pertaining to the Cyprus Institute in the context of the RAISE project. I also contribute towards the dissemination activities of the RAISE project. I really enjoy it. I work amongst a diverse group of people from various countries and backgrounds, each bringing a unique and interesting set of skills to the table.

What places have you been to because of your education/work and which one did you particularly like?

I studied in Johannesburg, South Africa and Cambridge, UK. Now I work in Cyprus. I don't have a favorite – they are all different and special in their own way. I have a diverse (and valuable) background because of that.

Have you ever met a world-famous scientist?

I am not one for putting too much emphasis on famous people. I believe you can learn and take something from everyone you meet- whatever their status or level of education is.

What advice would you give to young girls interested in science?

It's not complicated. Just go for it!



Hi Maria, please introduce yourself briefly to the readers.

I am Maria Girone, I come from Italy. I spent my student years in Bari, Apulia, where I grew up, while staying connected to Calabria, the place where I was born. I studied physics and obtained a PhD, specializing in particle physics. I am currently working at the European Laboratory for Particle Physics (CERN) as the Chief Technology Officer of CERN openlab. CERN openlab is a unique public-private partnership through which CERN collaborates with leading Information and Computing Technology (ICT) companies and research institutes. There, I am responsible for managing the overall technical strategy towards R&D in computing architectures, High-Performance Computing (HPC) and Artificial Intelligence (AI), in collaboration with the Large Hadron Collider experiments for the upgrade programs for software and computing, promoting opportunities for collaboration with industry.

When did you realize that you wanted to make a career in science and what was the incentive?

As a student, I have had a great interest in science as well as in humanities. Above all, I had a passion in the fundamental laws of nature and their understanding, which was also a recurring subject in family conversations.

What makes science work so special?

What makes science so special to me is the capability we have, to face complex problems and study them by breaking them down into manageable components. It is then, that we are finally unveiling their essential aspects and understanding their key elements.

What is your role in the CoE RAISE project and how do you like it so far?

In CoE RAISE, I am the Work Package (WP) 4 leader, focusing on HPC and AI solutions for data-driven use-cases. WP4 brings together applications from high energy physics reconstruction, seismic imaging for energy applications, industrial material production, and sound engineering. It develops the infrastructure that will allow the next generation of supercomputers to process the growing quantities of data from these areas using AI and machine learning methods. It's very interesting to work with applications from different domains, which face similar challenges.

What places have you been to because of your education/work and which one did you particularly like?

Thanks to my work, I have had the opportunity to attend several conferences and other work-related events all around the world. I particularly enjoy the format of the annual supercomputing conferences (SC and ISC), especially because of the fact that they bridge across many communities of researchers and technology experts, from science to industry.

Have you ever met a world-famous scientist?

Working at CERN has many benefits. One of them is that it is rather easy to meet and discuss with exceptional scientists, including world-famous ones. :-)

What advice would you give to young girls interested in science?

During my studies in physics, we had a balanced diversity in our classes, which is in primary importance for further personal and professional development. I strongly encourage everyone who is passionate with science to pursue their dream, fostering diversity and well-being.