1st Senior High School
Nea Makri
Greece

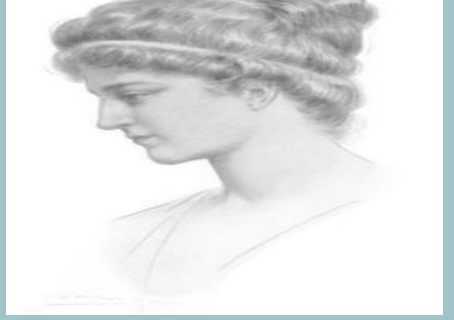
STEPS TO THE FUTURE

Co-funded by the
Erasmus+ Programme
of the European Union

ΙΔΡΥΜΑ
ΚΡΑΤΙΚΩΝ
ΥΠΟΤΡΟΦΙΩΝ
ΙΚΥ

GREEK WOMEN SCIENTISTS

HYPATIA



Hypatia (born 350–370 died 415 AD) was a Hellenistic Neoplatonist *philosopher, astronomer, and mathematician*, who lived in Alexandria, Egypt, then part of the Eastern Roman Empire. She was a prominent thinker of the Neoplatonic school in Alexandria where she taught philosophy and astronomy. Although preceded by Pandrosion, another Alexandrine female mathematician, she is the first female mathematician whose life is reasonably well recorded.Hypatia was renowned in her own lifetime as a great teacher and a wise counselor.

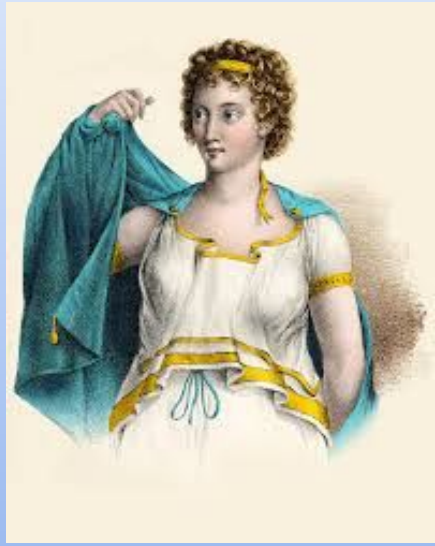
She is known to have written a commentary on Diophantus's thirteen-volume Arithmetica, which may survive in part, having been interpolated into Diophantus's original text, and another commentary on Apollonius of Perga's treatise on conic sections, which has not survived.It set out more than 100 mathematical problems, for which solutions are proposed using algebra.

Hypatia also have edited the existing text of Book III of Ptolemy's Almagest.It was once thought that Hypatia had merely revised Theon's commentary on the Almagest.

One of Synesius's letters describes Hypatia as having taught him how to construct a silver plane astrolabe as a gift for an official.An astrolabe is a device used to calculate date and time based on the positions of the stars and planets. It can also be used to predict where the stars and planets will be on any given date.

There are many theories about her death. The most known is that she was murdered because of her religion.

AGNODICE OF ATHENS



Agnodice was a young woman who wanted to learn medicine, at a time when there were no midwives because the Athenians forbade any woman from doing this. As a result of the ban, many women died from shame. Agnodice cut her hair and dressed as a man and studied with Herophilus, one of the most famous doctors at the time. When she had learned medicine, she heard a woman crying out and went to her; the woman refused assistance because she thought this was a man, but Agnodice lifted her tunic and showed she was a woman. The doctors who lost business assumed this 'young man' was seducing the women of Athens. The Areopagus court was about to find 'him' guilty when Agnodice again lifted her tunic, but was promptly charged with learning medicine despite the law. At this point, the leading women of Athens arrived and announced 'You are not husbands but enemies, for you are condemning the woman who brought us health'. *Then the Athenians changed the law so that free-born women could learn the art of medicine.*

We don't know the exact date of either her birth and death. However she was possibly born around the fourth century B.C and died around the beginning of the third century B.C .

Rodopi Stamatiou

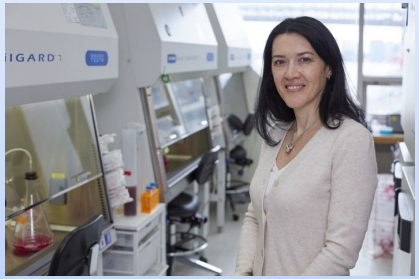
Dr. Rodopi Stamatiou was born on 10th April 1980 and is a researcher at the Department of Medicine of the University of Thessaly. She started her studies at the Department of Biology of the Aristotle University of Thessaloniki and was awarded a PhD by the University of Thessaly. Through scientific activities, Rodopi has specialized and is internationally recognized for her work in lung physiology.

Rodopi , through the scientific research she conducted with her team, regarding the pathology of the respiratory system developed a pioneering test for fast diagnosis of respiratory inflammation. More specifically,she has invented a technique for obtaining and processing bronchial secretions from intubated patients. This technique allows the rapid and immediate assessment of inflammation in the respiratory tract of patients.

Furthermore, she studied a substance and its suppressive effect on cells that cause inflammation in the airway. This opens a new way to treat chronic inflammatory diseases of the respiratory tract.

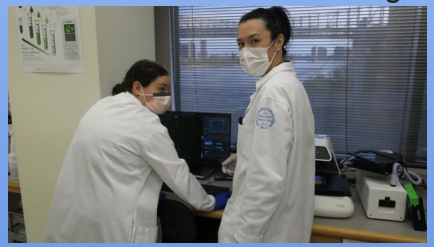
Finally, Rodopi, also recently joined the staff with the mentors of Greek Women in STEM to offer young girls of sciences career advice and support.

Theodora Hatziioannou

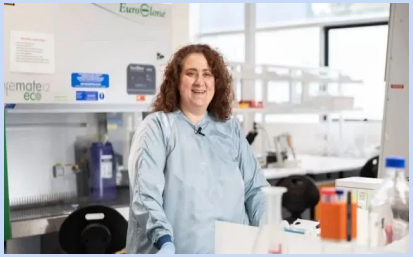


Theodora Hatziioannou is a Greek- American virologist. She was born and raised in Rhodes, Greece. She studied biochemistry at the University of Bristol in Britain and then got a Master's degree in biotechnology from Imperial College London. She worked as a research technician with Robin Weiss at the Institute of Cancer Research, where she says she fell in love with research and determined she wanted to go on to earn a PhD. She therefore moved to Lyon-France , where she earned a PhD from the University Claude Bernard in 1999. After earning her PhD , Hatziioannou moved to the United States , where she joined the lab of Stephen Goff at Columbia University as a postdoctoral fellow. She then did further postdoctoral research with Paul Bieniasz at the Rockfeller University at the Aaron Diamond Research Center for Aids. She became an Assistant Professor at the Rockfeller University in 2006 and was promoted to Associate Professor in 2012.In early 2020, in collaboration with her husband Paul Bieniasz she became involved in research on COVID-19.

The UoI had the opportunity to communicate with her via a video conference. They where impressed by the fact that Theodora and her husband were both spending most of the day at the lab and their children were always complaining. " You never have time for us and even when you are home you always keep talking about your job and the researches." the phrase that was remained engraved on the University students.



Professor Vasso Apostolopoulou



Professor Vasso Apostolopoulos is currently the Pro Vice-Chancellor, Research Partnerships at Victoria UniversityShe was born and raised in west Melbourne, Australia. Her parents were immigrants originated from Amaliada, Greece. She received her PhD majoring in immunology in 1995 from the University of Melbourne, and the Advanced Certificate in Protein Crystallography from Birkbeck College, University of London. Her expertise is multi-disciplinary with extensive expertise in immunology, x-ray crystallography, medicinal chemistry, cellular biology, molecular biology. She has extensive translational research expertise with development of drugs and vaccines.Professor Vasso Apostolopoulos is a world-renowned researcher who has been recognised with over 100 awards for the outstanding results of her research. Most notable are the Premier's Award for Medical Research, Young Australian of the Year (Vic), Greek Australian of the Year, Woman of the Year. She was named as one of the most successful Greeks abroad by the prestigious Times magazine.

Vasso was the first in the world to develop the concept of immunotherapy for cancer in the early 1990s, which today is used by hundreds of labs around the world. Immunotherapy aims to boost specific immune cells and program them to kill cancer cells; it was used by Vasso to *develop the world's first breast cancer vaccine* with phase I, II and III clinical trials completed.Using immunotherapy, Vasso has also developed the world's first ovarian cancer vaccine, which attracted the investment by a pharmaceutical company and has been commercialised in the Middle East. Committed to the wide-ranging benefits of immunotherapy, Vasso has applied this approach to other diseases including a vaccine for multiple sclerosis (which will undergo human clinical trials early in 2019). Vasso's work has been awarded a research grant to develop a vaccine for type-1 diabetes.

In response to the current global emergency, Vasso and her team in VU's Immunology & Translational research are focusing their efforts on responding to COVID-19, investigating and working on vaccines and drugs to treat the virus.

IPHIGENEIA PAGOMENOU

Iphigenia is a graduate of the Department of Geography of the Harokopio University, Project: Generation Next is an educational program for the development of digital skills, which has been implemented since 2017.

It enables students and teachers from all over Greece to enhance their knowledge, experiment with STEM sciences and develop innovative applications, giving solution to problems of the local community and everyday life, while at the same time making science and technology more accessible to the general public.

The Project she participates in is *Generation Next*, an educational program for the development of digital skills, which has been implemented since 2017. It enables students and teachers from all over Greece to enhance their knowledge, experiment with STEM sciences and develop innovative applications, giving solution to problems of the local community and everyday life, while at the same time making science and technology more accessible to the general public.

Her vision is for the students all around Greece (despite their socio-economic profile) to maintain the knowledge they gain even after they are done with school, through this project, because as she believes “if you tell them they will forget but if you show them, they will remember”.

Ellie Papaemmanouel

Ellie Papaemmanuel is a biologist and a geneticist who discovered the gene that ***c***auses childhood leukemia. Her research on myelodysplasia suggests that new genetic endoscopies would facilitate mutation screening.

After more detailed research they found that 70% of the differences in the progression of leukemia were due to gene mutations.

Ellie Papaemmanuel was born in Athens. In 2004 she received her degree from the University of Glasgow. Looking for a career in cancer research, she received a PhD fellowship at the Cancer Research Foundation in London. There she conducted research on genetic predisposition to colon cancer and childhood leukemia.

From 2010 to 2014, she worked as a senior postdoctoral researcher at the Wellcome Trust Sanger Institute. From 2014 until today, she works as a team leader at the University of Cambridge. Since March 2015, she has been an assistant professor at Memorial Sloan Kettering Cancer Center (MSKCC). She has worked at Cambridge, the Wellcome Trust Sanger Genome Campus, which is described as one of the leading gene research centers in the world.

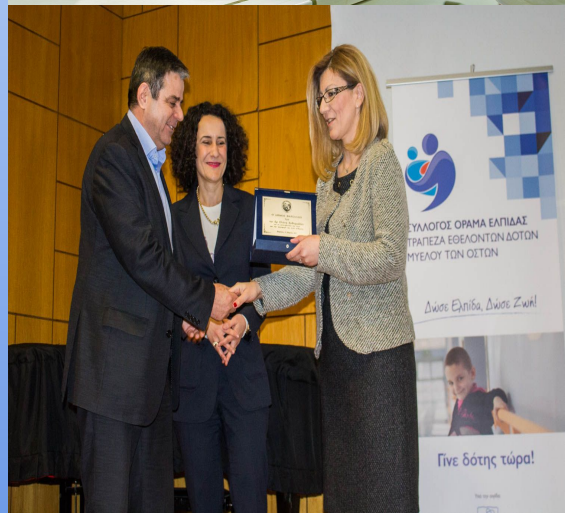
It's worth mentioning her contribution to research into the genetic predisposition of cancer, in which she pioneers, while coordinating a global survey, involving more than 30 countries, for the collection and examination of 17,000 samples, covering all forms of myeloid and lymphocytic leukemia.

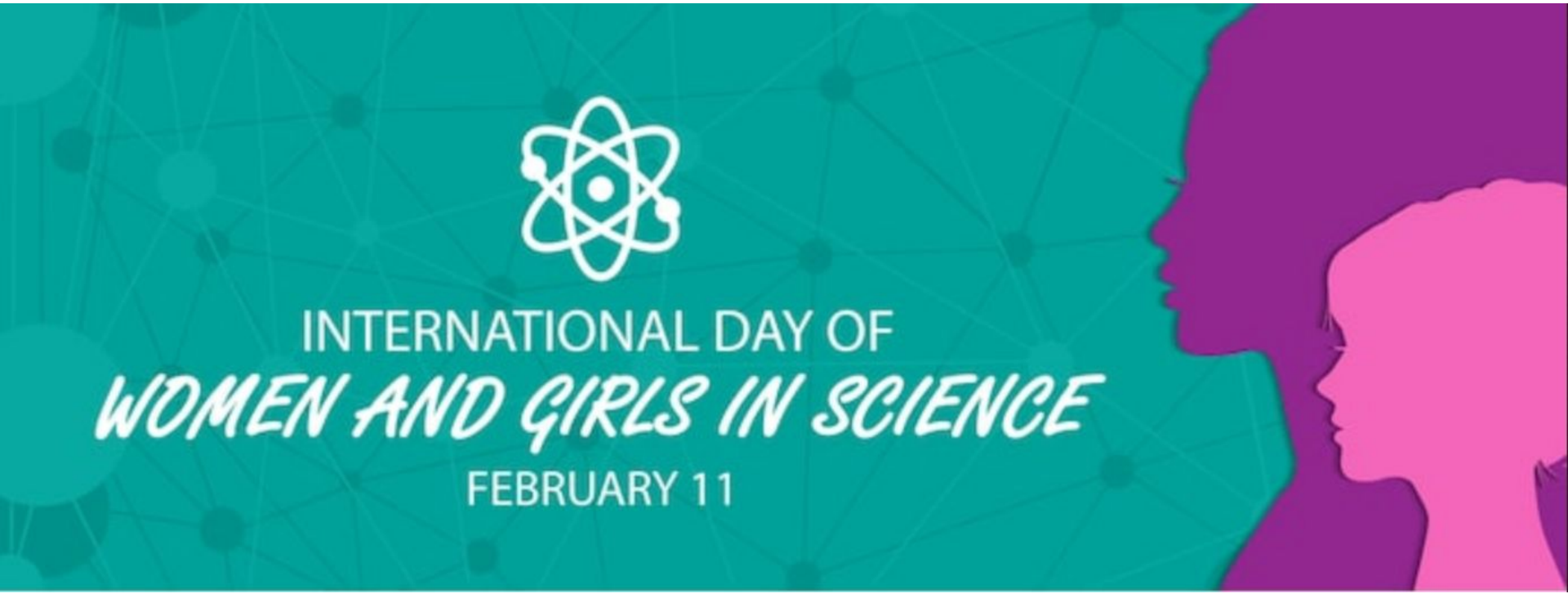
ELENI EFTHIMIADOU

Eleni Efthimiadou has graduated from the University of Athens and she completed her MSc. (Master of Science) and her PhD (doctoral degree) in the Dept. of Chemistry.

In her field of work she had been occupied with composition, characterization and biological evaluation of organic and inorganic compounds. Her postdoctoral dissertation at the Sol-Gel laboratory of NCSR Democritus has as its object the targeted pharmaceutical delivery systems for the fight against breast and prostate cancer. Furthermore, for her work in Biosciences she was awarded the “The Greek Award L’OREAL - UNESCO for Women in Science”. Recently, she was elected Professor in the Dept. of Inorganic Chemistry at the Dept. of Chemistry of the National and Kapodistrian University of Athens, continuing her research in the field of bioorganic chemistry and applications of nanotechnology in the field of diagnostic treatment.

Besides her contribution in the scientific field ,she is also a remarkable advocate for the balance between male and female presence in the sciences and research and S.T.E.M.




INTERNATIONAL DAY OF
WOMEN AND GIRLS IN SCIENCE
FEBRUARY 11