



**GLOBAL  
YOUNG  
ACADEMY**

May 2024



# **Challenges Faced by Women Researchers: Stories from all around the Globe**

**Women in Science working group  
of the Global Young Academy**

Nova Ahmed, Amal Amin, Oon Chern Ein, Mareli Claassens, Eqbal M. A. Dauqan, Menattallah Elserafy, Flávia Ferreira Pires, Mimi Haryani Hassim, Nafissa Ismail, Sandeep Kaur, and Lydia Rhyman

## Imprint

**Publishing Date:** May 2024

**DOI:** 10.26164/GYA\_01156

**Publisher:** Global Young Academy  
at the German National Academy of Sciences Leopoldina  
Emil-Abderhalden-Str. 37, 06108 Halle (Saale), Germany

**Editor:** Women in Science Working Group of the Global Young Academy

**Copy-editors:** Anna-Maria Gramatté, James Curtiss, Global Young Academy

### **About the Global Young Academy:**

The vision of the GYA is *science for all; science for the future*, and its mission is to give a voice to young scientists and researchers around the world. The GYA, founded in 2010, is an independent science academy of 200 outstanding early- to mid-career researchers from six continents who are selected from across disciplines based on their academic excellence and commitment to engage with society. GYA members serve five-year terms, and the GYA presently counts members and alumni from over 100 countries. The GYA Administrative Office is publicly funded and hosted at the German National Academy of Sciences Leopoldina. The wide array of GYA activities are supported by a range of international public and private funders.

**Find out more at:** [www.globalyoungacademy.net](http://www.globalyoungacademy.net)

### **Co-Chairs:**

Priscilla Kolibea Mante (Kwame Nkrumah University of Science and Technology, Ghana)  
Felix Moronta Barrios (International Centre for Genetic Engineering and Biotechnology, Italy)

**Managing Director:** Beate Wagner (Germany)

**Images:** Cover illustration by Adobe Stock. Drawing on page 8 by Adila Farisa KM, India. Drawing on page 15 by Novac Bogdan Stefan, Romania. All other pictures by the authors.



## Table of Contents

<b><i>Imprint</i></b> .....	<b>2</b>
<b><i>Foreword</i></b> .....	<b>4</b>
<b><i>Introduction</i></b> .....	<b>5</b>
<b><i>Stories</i></b> .....	<b>9</b>
<b>Social Challenges of Women during PhD: A Personal Reflection</b> .....	<b>9</b>
<b>I Found My New Sunshine in a Foreign Land</b> .....	<b>11</b>
<b>Being A Divorced Woman and A Mother in Brazilian Academia</b> .....	<b>16</b>
<b>My Dramatic Life Story</b> .....	<b>19</b>
<b>The Journey to Becoming Good Enough</b> .....	<b>29</b>
<b>Running Faster</b> .....	<b>32</b>
<b>Escaping the War into Uncertainty</b> .....	<b>35</b>
<b><i>Conclusion</i></b> .....	<b>38</b>

## Foreword

Lydia Rhyman and Mareli Claassens

Co-leads of the GYA Women in Science working group (June 2023 - June 2024)

We are currently living in a world where scientific innovation and discovery hold immense significance. Although being underrepresented, women researchers play a pivotal role within the scientific community. It is important to address and recognize the challenges preventing the full participation of women in the STEM fields. The Women in Science working group of the Global Young Academy (GYA) compiled stories on the overlooked experiences of women researchers worldwide as a necessary step to nurture a scientific community that is inclusive and cognizant of these challenges. The personal stories illustrate means and ways in which women researchers overcome a range of challenges such as discrimination, workplace pressures, societal biases while achieving the equilibrium between professional and personal life. Their journeys serve as evidence of their creativity, resilience and steadfast commitment to excellence. This book aims to raise awareness of these hurdles and to promote changes in the scientific community and society at large. It is a call for action to create an inclusive and equitable scientific environment where every voice is heard, all talents are supported, and all dreams are fulfilled.

## Introduction

### Women in Science: Roller Coaster

Sandeep Kaur

**GYA Member, Women in Science working group member, India**

The thought of writing this book by the Women in Science (WiS) working group of the Global Young Academy (GYA) originated from the fact that there has been a growth in the number of women pursuing careers in science at rates never seen before. The group, however, felt that women scientists are still grossly underrepresented in STEM but whether people like it or not, the majority workforce in these fields will be women and so society needs to be ready, to adapt and to listen as women can play a pivotal role in the progress and sustainability of the world. Therefore, the members of the WiS group, based on their own experiences and stories, or based on those from other women scientists known to them, would like to highlight that in spite of major obstacles they have managed to achieve their goals and are proud of their achievements. Though career challenges confronting women scientists have been steering them away from such careers, sensitivity to the issue holds an important key to achieving future success in the science systems of continents.

There are different reasons as to why women scientists find it difficult to sustain their scientific careers but “No one wants to give up what one likes to do” given the choice. The stories in this book highlight some of the challenges faced by women scientists across the world, which have only made them stronger, bolder, and confident in their personal and professional lives. The stories and experiences of the women scientists from different parts of the world in this book depict that though the path chosen by them has been full of ups and downs, and very difficult at times, there have been saviors in various forms who/which have been their guides in overcoming the obstacles. We know that everyone (men/women) striving for a career in science is under tremendous pressure to “perform” but it needs to be pointed out that the hardships experienced are of different nature.

From the stories of the contributors to this book, we become aware that women face barriers that are either psychological or societal or both, and though they succeeded in their careers

they had to pay a high price to climb up the ladder of scientific success. Though this probably applies to men as well, it is clear from the stories that the challenges and feelings of guilt for women in science weigh them down making it extremely hard for them to be successful.

In the stories we see the societal pressures on women at work and at home, which become the unwanted challenges preventing them from being efficient and working effectively. However, the lessons learned and the received supports helped them in overcoming most of the challenges and in striving for excellence. We see through the stories how women scientists in spite of fleeing war, facing social stereotypes/systemic barriers, discrimination (gender, race and other inequality), workplace bullying, gender biases in rights and entitlements, workplace sexual harassment, work related stress/priority setting and time management, work life imbalance/ work-family role conflict/family pressure (gender-based divisions of labor in both the family and scientific institutions), internal obstacles, job security among younger women scientists, mobility, disparities between men's and women's access to power and resources (including mentorship and support), gender disparities in employment, academic promotions or seniority, funding opportunities and publications have emerged winners. Overall, though challenges will always exist and be the roadblocks, there will also be support systems that will make a difference in career paths. Hence, the existence of challenges and how to eventually overcome them will lead to successful examples as role models for the ones around them in their own spheres. It is the challenges that tend to make women work on their own terms and become empowered.

Despite the problems and challenges faced by women scientists in the stories in this book, other groups who also face challenges cannot be ignored. This is not part of the discussion in this book. However, obstacles in any form, for any group, need to be addressed so that the path for more women and others who are discriminated against to join the scientific workforce can be paved. Through different stories of women scientists, the chapters in this book aim to understand the challenges experienced by women scientists across different regions and coping mechanisms used by them to overcome the barriers throughout their careers for improved performance. The commonly adopted coping strategies are self-confidence, dedication and hard work. In summary, though women scientists face a number of challenges that can greatly affect both their individual and career growth, intrinsic (personal) and extrinsic

(institutional) factors can play a crucial role in improving the women scientists' wellbeing and productivity.

Our WiS working group at the GYA hopes that the stories in this book will help the community to realize and accept that the setup and structures of academic and research organizations need to be re-constructed across the globe to provide an equal footing to women and other groups to make their contributions in their own way. For example, improvement in the work-life balance is possible through flexible work, women-friendly management policies, fair appraisal and mentorship at the workplace which would also help to reduce work-related stress. Additionally, women also need to be aware and have inside knowledge of the ways around them. The problem of women lacking a sense of belonging can be addressed by increased visibility of women in STEM through awards and prizes. At the same time, women in high-profile positions can play the role of mentors, sponsors, speakers, and leaders in their field. Harassment can be eradicated by policies of intolerance by institutions and processes that support individuals.

Moreover, the viewpoint of the scientific community and society at large needs to change in order to meet the expectations of women with the hope that the barriers are removed, and other women are inspired to jump onto the bandwagon. The contributors to this book need to be given credit for being strong and coming to the forefront with their stories and highlighting the roles they have played in contributing to science. They are already an inspiration!







## Stories

### Social Challenges of Women during PhD: A Personal Reflection

**Nova Ahmed**

**GYA Alumna and past Executive Committee member, North South University, Bangladesh**

I am Nova, a computer scientist from Bangladesh. I started my PhD at Georgia Institute of Technology, USA, along with my partner who was also a PhD student at the same University. In our student family, we had two baby girls – Anuva and Arisha.

My journey as a PhD student was non-traditional. I was a student-parent and had to balance my family in USA along with concerns for my mother who was going through a difficult life changing process. My parents got divorced while I was pursuing my higher studies. It was a non-trivial situation since my father remarried a young movie star who got huge public attention in our country. The personal difficult time often eased up around my two daughters. Many stressful nights would end with laughter around the silliness of our daughters. How can you remain stressed when you watch *Barney* with your baby girls? I would like to share few experiences that would reflect on the social difficulties for women doing PhDs, particularly, from the perspective of ones from a developing country like Bangladesh.

My preparation towards graduate school was loud in the Bangladeshi community living in Atlanta, USA. Once I joined the PhD program, a timid girl from our neighborhood shared her dreams to join graduate studies. I was very excited about it and showed her my support towards the process. I brought my GRE books, set of stationaries, copies for her. I later came to know that she was publicly humiliated by her spouse for studying hard. At one point she broke down and mumbled mentioning it was not her dream to study: *“It was not my dream, Nova pushed me too hard to dream in that way ...”*. Until that day, I did not know that dreams can be caged in our patriarchal society.

The lack of support for women were almost universal. I had a mentor from our Bangladeshi community, a very talented female student pursuing her PhD prior to my journey. She had a

supporting spouse working full time and had two kids. I used to seek advice regarding academic and non-academic issues. Once she asked me to keep the conversations around my children away from my faculty advisor. When I asked her the rationale behind such strict division, she shared a story of her own. She once requested her advisor to move the group meeting time by 30 minutes so that she could drop off her kids to day care and join the meeting without rushing into it. Her advisor shifted the meeting time 30 minutes earlier instead of delaying it, creating further inconvenience. She realized it was better to strictly keep the family affairs away.

My personal journey was blessed with support from my advisor who helped me in all my academic and non-academic activities. He used to play the role of my guardian during many difficult days through my academic journey. I designed an entire experiment that did not provide the desired results and we had to discard the concept that was theoretically sound but was not viable through the implementation phase for some technical limitations of the currently available tools. I was frustrated and demotivated. My advisor worked with me through the process, and we came out with wonderful ideas that were versatile and innovative. I simply needed a positive voice that believed in me, and I always had that from my advisor.

It was not the same for many other student parents. Some graduate students faced difficulties after sharing about their pregnancy with their PhD advisors. Some lost their advisors, some lost their funding. I worked with many other graduate students and shared our concerns to the graduate student council. Little doorways could open up great opportunities for graduate students.

I wish, we could talk more and share more to ensure policy-level intervention for graduate students. We need greater social support to retain and nurture women to ensure equality.

## I Found My New Sunshine in a Foreign Land<sup>1</sup>

**Mimi Haryani Hassim**

**GYA Alumna, Universiti Teknologi Malaysia**

Who could ever imagine that behind the bright smile, big laughter and joyous expression I always saw whenever I met this good friend of mine, she was experiencing a tremendous amount of trauma during her PhD study. Dr LZ left Malaysia for South Korea in 2008 with a positive and strong determination to gain knowledge, learn new hands-on skills and build a beautiful professional relationship with her PhD supervisor. Her hopes and her actual PhD journey, however, appeared to not be as closely related as she had hoped. From the very beginning, her resolve was tested. She had to go to South Korea without her husband because unavoidable circumstances related to work prevented him from accompanying her. Even worse, she had to leave just two weeks after having a miscarriage; but in pursuit of knowledge, she went to Seoul with an open heart.

It was only when she arrived that she discovered that her so-called new heavenly home in the University's new lab (Laboratory of Polymer), located at about 1.5 hours on the outskirts of Seoul was in fact, a deep, dark, pit. Even though she started off with a very enthusiastic spirit, nothing went right for her from day one. She completed all 36 credits of courses and exams that were required for a PhD student in South Korea. On most days, she stayed in the lab until midnight. She came to the lab on weekends and during the public holidays, but nothing she did was ever noticed or acknowledged by her supervisor. Instead, all Dr LZ and other students got for obeying their supervisor diligently was being yelled at, scolded, and humiliated, repeatedly.

The other students in the lab knew the supervisor and his temper well. They manipulated and adjusted their experimental data to get his approval and most importantly, to avoid being scolded. Dr LZ, however, was too naïve and pure-hearted to commit such a dishonest act to please her supervisor. Thus, every time she showed him the not-so-nice-but-actual data obtained from her experiments, she would be yelled at without mercy. Even when she tried to

---

<sup>1</sup> For confidential purpose, in this article, I name this friend of mine as Dr LZ.

reason with him, that perhaps there were problems with the equipment since repeated experiments kept generating bad data, all she received was blame and claims from her supervisor that she was uttering nonsense.

Even though she arrived home late every single night, she could not dare go to bed right away. It was a must for her to check all incoming emails and make sure any from her supervisor were read right away. No matter the time these night emails came in (usually at 3 am or later), she had to make sure she read them there and then. Her supervisor 'spied' on his students and anybody who left a single email unread before coming to the lab the next day received a scolding. Another thing that really bothered Dr LZ about her supervisor was his constant smoking in their lab. Imagine being buried in smoke in a closed-door lab, all the time. It was a very uncomfortable environment, not to mention the potential health implications for the students. Nobody could complain. In fact, the local students kept a constant flow of cigarettes for the supervisor to prevent him from hijacking their own whenever they were in the lab.

Waking up every morning was a hellish experience. She started each day totally drained of all energy and positive vibes. It was like being stuck in a terrible loop – going to the lab, doing experiments again and again, turning up only bad data - but she still kept going as she desperately needed the data for her PhD. All data she showed to her supervisor turned into a screaming match with her at the receiving end. One night, she even had to stay in the lab alone because her supervisor asked her to separate a 5-litre solution from a mixture of solute and solvent. The worst part was this was not related to her PhD study at all. It was just a favor her supervisor volunteered to do for his friend that she ended up suffering for. She had no choice but to do random and tiring chores whenever she was asked. Chores which had zero benefit for her own study. Many who knew of her unbearable experience in the lab advised her to switch to another university. Her optimism managed to keep her going longer than she should have. She self-motivated, patted herself on the back every morning, and kept trying to make it happen.

After one and a half years without any measurable progress on her PhD study despite her hard work, she finally reached her limit. The whole situation peaked when she showed her supervisor a paper she had drafted for a journal. Without giving her any reason, he flared up

and simply threw her manuscript into a bin whilst yelling and cursing. All the patience and calm she had, shattered into pieces in that moment. For the first time, she broke down and cried in front of her supervisor. She told him that she could not take it anymore and she wanted to quit and return to Malaysia. Only God knows how free and relieved she felt, after pouring out all the pain she had bottled inside for a year and a half. Even though, she did not know how she was going to continue pursuing her PhD at the time, she felt that the heavy burden inside her heart had finally been lifted.

Her experiences in Seoul also strengthened her faith and brought her closer to the Creator. She knew at that time, with no family around her, all she had was God. She kept praying every day, asking for the patience and courage she needed to finish her PhD. Her husband, who is her biggest supporter and motivator, was also another factor which kept her sane and optimistic. Her prayers were finally answered when another Malaysian student (a colleague of mine and Dr LZ's) arrived in South Korea to further her PhD study in one of the famous universities in the center of Seoul. This colleague asked her supervisor if he could help find a supervisor for Dr LZ at her university. Luckily, the search was fruitful and Dr LZ got a new supervisor in the university in Seoul. Her new supervisor helped her secure a scholarship from the university and gave her a monthly stipend to help her survive the expensive city of Seoul.

This change did not come without its own challenges. She needed to take all 36 credits again and start her PhD from scratch with a new topic. Since she had already wasted a year and a half, she worked twice as hard as she had at the previous university. She did late nights in the lab every day and worked on Saturdays too. This time around, she enjoyed every single moment. Her new supervisor was very respectful to students and gave her all the support she needed. There were times her supervisor asked her to take breaks and not to work herself to death. The wives of her lab mates were also gracious enough to prepare food for her, especially during the month of Ramadhan for iftar (the breaking of fast) as they knew her schedule was very tight and left no room for her to make her own food. It was a total 180-degree change compared to what she experienced before.

It was not always a bed of roses for her though. A major challenge arose when it was time for her to renew her student's visa. The immigration office informed her that her visa had actually

expired a year ago when she quit from her previous university. For the new university, she was expected to apply for a new visa, which she was not aware of. As a result, she was labelled as an 'illegal immigrant' and detained for long hours in a very unfriendly environment. She spent almost all her time in detention crying because she was so afraid. One of the immigration officers pitied her and gave her permission to leave the detention center, provided that she showed up the next day with a flight ticket back to Malaysia. Her supervisor found out about her situation and volunteered to sponsor her trip back. Thus, she went back to Malaysia for a very short period and returned to Seoul with a legal student visa. Despite these challenges, Dr LZ managed to successfully complete her PhD within three years at the new university. This is a very rare feat in South Korea where it normally takes four years and above to complete a PhD.

Her terrible experience with her first supervisor did not come without positive lessons. Even though she lost 23kg in body weight and missed her menstrual cycle for half a year because of stress, she also learnt the importance of being bold in her decision-making especially with regards to her well-being and mental health. She learnt not to compromise when it comes to self-care and not to keep things inside when she is grieving. On the negative side, she admits that till now, her self-esteem still suffers due to the maltreatment she endured at the hands of her first supervisor. All in all, she feels very grateful that she is surrounded by many wonderful friends who understand her dark experiences, and are always supportive and encouraging in all aspects of her life.

Whenever she is asked for tips that she would like to share with all the women out there struggling with their PhD studies, her homerun phrase is – NEVER GIVE UP!

No matter how hard the challenges are, remember, for any problem bestowed upon us, there is always a perfect solution prepared by God. We only have to understand how to reach out to people, ask for help, listen to good advice, be more open to consider and accept new pathways and options, and most of all – to love ourselves more. No one can love us more than we can love ourselves. When we position ourselves as the highest priority, no one can bring us down or step on us mercilessly. So, for all the women out there; love, appreciate and spare yourself more in your ambitious pursuit of a doctoral degree.





Being an archaeologist is not an easy task at all. Women in this field have rarely been admitted to research teams and given household chores. Moreover, they were sometimes excluded from scientific presentations. But thanks to some extraordinary women who have dedicated their entire lives to archeology and their field of study, they have accomplished great things. In recent years, this field has greatly expanded its working method and revitalized it. Archeology is no longer just hard work on site, but requires chemical, paleo-botanical analysis, macroscopic observations of the material and careful sampling of dates. The greatest joy is when all these wonderful results are disseminated and presented to the public. As I said above, archeology is not an easy task, but it is trying to be more and more enjoyable and closer to people.

**Novac Bogdan Stefan, Romania**

## Being A Divorced Woman and A Mother in Brazilian Academia

**Flávia Ferreira Pires**

**GYA Alumna, Social Anthropologist from Brazil**

My name is Flávia Ferreira Pires. Ferreira is my mother's family name. Pires is my father's family name. I was born and bred in Brazil. Coming from the family I came from one could never realize that we are not in a gender-balanced country. I only encountered difficulty related to patriarchy when I found myself divorced with two small children to take care of. Until that moment my life was an illusion based on the idea that men and women have the same opportunities in professional life.

I am the third child of a family with four siblings. Between my brothers and me there was no visible difference in treatment. On the contrary, I was given the house keys and the freedom to stay longer outside at night earlier than my older brother. My mother and my father had the same attitude toward our education. However, my mom was always telling me to study, work and never get pregnant or get married young. For her, it was necessary to be independent before getting married or having children. I followed her advice. I married at 32 years old. My first baby was born when I was 34 and the second child when I was 37. I lived with the father of my children for 10 years. We got divorced when my second baby was yet to be born. From that moment on, a lot changed in my life.

Suddenly, I became fully responsible for the daily care of a household of three. I had a maid and a nanny for a while. That was not just a luxury that I allowed myself; it was indispensable. Schools in Brazil are normally open for 4 hours. The rest of the time the child stays at home. It was my duty to provide caring and love, follow school activities, health checkups and eventually illness. The financial burn was obvious. Schools are private, living expenses are pricey, and the health system is not free. My family lives far from us – three hours by plane – therefore we have an annual high cost of plane tickets.

I had no time for myself, I left behind sports, therapy, my work, my friends, idleness and hobbies. In other words, I lost myself. I was always exhausted. I aged. It took me three years

after the divorce to slowly start thinking about my sexual and affective life. I had completely erased libido from my existence. At work I was content, but it was never enough. I was used to being highly productive and abruptly I could not keep up with new publications, I could not write papers or submit applications for research grants. I found myself deprived of the privilege of good memory, fast thinking and efficient working.

When it came to my two daughters, guilt was always lurking. Why could I not be happy with them? Why could I not enjoy these elusive moments with them? Was having children not my dream? Why was I unable to forget work and focus on them? I went to the doctor, I started mental health treatment.

These are the costs of being a professional woman with children in Brazil: financial, emotional, limited time to oneself, for the family and for work, health care costs, mental health issues due to overwhelming demands, among others.

It is important to point out that the life of their father has become very different from mine. He soon had a promotion as he had more time to work. He found a girlfriend within months after the divorce. His savings increased. He was going to sports, eating and sleeping well, young, without childcare responsibilities, handsome (mature men are considered charming, while mature women are considered undesirable).

When my first child was born, I was glad that I already had a permanent academic job that allowed 6 months maternity leave and flexible working times. Work initiatives to help narrow the gap between women and men counterparties are rare. Maternity leave is in place with full payment for 6 months in the public system and for 4 months in the private sector. Paternity leave is a few five days. Few public or institutional policies address women or mothers/fathers, for example, baby and breastfeeding facilities, research grants for parents. However, I feel that we are in a patriarchal country, therefore all the institutions are biased in that sense. For instance, women find it difficult to raise their voices and to be taken seriously in departmental meetings.

Looking forward I see a growing number of initiatives mainly brought forward by women themselves to address the issues of parenting in professional and specifically scientific settings. It is essential to involve men and fathers in the debate. The actual arrangement is detrimental for both men and women. Both are trapped in societal expectations of roles regarding care, domestic life and children's education and nurture. Caring is an essential part of our lives. Caring for others must be taken as a valuable job. Presently, appropriately valuing domestic work and children's care is crucial for the feminist movement.

## My Dramatic Life Story

Eqbal M. A. Dauqan

GYA Member, Yemen / Norway

### Childhood

I lived a beautiful childhood with a close-knit family that loved each other. I was a naughty child who always loved to play, have fun, and pull funny pranks on family members and friends. My parents sent me to primary school when I was four-and-a-half years old, in the same year that my older sister started. The purpose was that my sister would take care of me while in the same class and while going back from school, but all their predictions were not correct.

I used to go to school with my sister to play, have fun and enjoy my time there. I had no interest in studying and most days would go home without my school bag as I used to keep it aside in the school playground or outside the school and play with the other kids.

When my mother asked me where my bag was, to avoid punishment, I would tell her every time that it was lost. My father was always trying his best to help us at all stages of our study, and my beloved mother was a supporter and had a kind and big heart.

My father is an educated person and has always encouraged us to continue learning to the highest levels. I moved from primary school to middle school with the same naughtiness and love for fun, and then secondary school with some naughtiness and a lot of love for fun with friends at school. In high school I did not like science, especially chemistry. I sometimes agreed with my friends to pull funny pranks on the chemistry teacher so that he would get angry and not give us any lessons.



### In the university

When I finished school, my father guided me in enrolling in the physics department at the university as he knew that I did not have a liking for chemistry. I used to and still do not like

anyone who says that I cannot do a certain thing even if I really cannot do it. I have always faced this challenge with myself and always believed that nothing was impossible. So, I told my father that I wanted to change my major in the university to chemistry, and my father and the rest of my family were shocked to hear this, as they knew very well that I did not like chemistry. My father said to me, "But you do not like chemistry". My response to him was that there were teachers, professors, and scientists in chemistry, so what was the difference between them and me? We were all humans, and we all have the same mind to think about. If they studied and worked hard to reach a certain stage in the field of chemistry, then I could try too. *"It was just a challenge when they said that I did not like chemistry and would not be able to study it and so I challenged myself that I could do this"*. My father respected my opinion, and I changed my major at the university to chemistry.

My first year at the university was not easy as I was very exhausted from the number of courses. The university was a completely different world from school. In the following year, the courses felt much lighter, and my family was constantly encouraging me to continue and not give up. In the third year, I decided to start researching a topic for the graduation project, which was too early, as the graduation project usually began in the fourth and last academic year of the course. By chance, I attended a scientific symposium of some professors from Malaysia who presented information on palm oil. I was amazed to know about the beautiful palm forests in Malaysia and the health benefits of palm oil. I was so impressed with the topic that after the seminar I made sure that I interacted with one of the professors who had given the wonderful presentation. I requested study material from him that contained information on the topic, he gave me a small brochure and a CD with a great video on palm oil. The next day, I went to the professor at my university, who had been appointed as the graduation project supervisor. I told him that I wanted to start my graduation project on palm oil as I needed time and the fourth year was not enough to complete the project. My supervisor noticed my enthusiasm and so granted my request, and thus, I started reading and studying the topic closely. In the fourth year, scientific experiments were carried out in the laboratories of one of the ghee and soap factories in Taiz, especially because this factory imported crude palm oil from Malaysia. I was the first bachelor student to discuss her graduation project in one of the major public halls, in front of the public and the press. My thesis was printed and distributed to all offices of private and public universities in the Republic of Yemen. I



graduated from the university with very good grades and as a result was offered to teach at the university as an Assistant Professor which was not a permanent position. I decided to continue my higher education and get my master's and doctorate. I wanted to further develop my graduation project into something big so that people could benefit from it.

### **Higher education journey**

#### *A- Master's degree*

My family was surprised that I wanted to continue my higher studies and enroll in the master's program in organic chemistry at Taiz University. Despite their amazement, they encouraged me to move forward without any hesitation in pursuing my higher education. I had hoped that the topic of my master's thesis would be an extension and development of what I had started in my graduation project at the university, but unfortunately it was completely different. However, I decided to continue and obtain my master's degree and make it a bridge to my dream. I faced many difficulties and challenges during my master's degree, as the university lacked certain equipment for analyzing the compounds that I extracted and synthesized in the laboratory, and so had to send the samples to be analyzed in the laboratory of one of the universities in Egypt which was very expensive. My father took care of all the expenses of the research work I was undertaking. Also, I had to wait for three to five months to obtain the results of the analysis from Egypt. Further, there was a delay in purchasing and obtaining specific chemicals required for my experiments at the university. In addition to my master's studies, I was teaching an organic chemistry practical course to the undergraduate students in the same university.

To help my father financially, who was spending a lot of money on my studies, I taught chemistry to high school students in one of the private institutes in Taiz after working hours at the university. I worked hard in teaching and in my master's, and when the time came to submit my thesis, the main supervisor passed away. I had to wait until a new supervisor was appointed and reconsidered some points of my thesis. During those days, I was trying to write to an organization in Italy to obtain a doctoral scholarship, however, no one thought that I really intended to travel outside Yemen and complete my higher education. In college, I would tell my friends that I wanted to pursue a Ph.D., and they would chuckle and ridicule the idea. Even my family and friends did not believe that I wanted to continue my high education due

to the difficulties I had faced in obtaining my master's degree. I strived to obtain the scholarship and prove to them that nothing was impossible, *since I did not like someone who told me that I could not do a certain thing or that this thing was difficult to achieve*. One of the employees at the Internet cyber helped me in sending emails to the organization and in replying to their emails to find out the requirements for obtaining the scholarship as I could not speak English well at that time. I finally defended my master's thesis after five years of hard work and suffering. A few days later, I came home from the Internet cyber carrying the scholarship tickets in my hand. It was only then that my family understood that I was serious about traveling outside Yemen and continuing my scientific career. The scholarship was for the country that I had wished to visit after seeing the beauty of the palm forests. *My scholarship was to Malaysia, yes to Malaysia!* It was the first time I traveled outside Yemen and the first time I had been without my family for a long time, but I always told them and promised that I would make them proud of me.

*B- Doctorate and post-doc:*

I arrived in Malaysia at the end of 2018, and from here began my scientific journey. I was very excited to start my doctoral degree in the field I had always wanted to study viz., biochemistry, and to continue what I had started in my bachelor's project. I dreamed of enhancing my knowledge on palm oil and conducting scientific experiments to find out its health benefits. At the beginning of the study, I faced difficulties with the English language and the handling of lab rats. Though I did not speak English well, I took the help of my colleagues in the lab to translate things that I did not understand. I always tried to be with my lab mates and practice the language with them until I learned it. Apart from my supervisors, my lab mates were my best support during my PhD study. In dealing with lab rats, I was finding it very difficult until one day I heard my supervisor say, *“if you do not want to deal with rats, I will change your specialty”*. From then on, I decided to try and worked really hard until I was able to handle them. Studying biochemistry was rather difficult for me as I did not have good knowledge in the subject; I had mostly studied organic chemistry during my master's degree. I was always asking my colleagues and supervisors about everything that I did not understand, even though it was simple. It seemed to everyone that I was an annoying person, but I learnt a lot with the support of my supervisors. Moreover, all equipment, chemicals, and important facilities for conducting the scientific research during the PhD were available to me. I always thanked God

for this as I was so exhausted during my master's study due to lack of research facilities. I was surprised when my supervisor sent me to attend an international conference even though I did not have complete results of my experiments, but then I understood that she wanted to encourage me to attend scientific events and learn from others the way of presenting results, discussing it, and in exchanging ideas with the scientific community.

When I obtained my research results, my supervisor encouraged me to write and publish research articles. She always encouraged me to participate in conferences both in Malaysia and internationally with financial support. I was working hard in the lab until midnight, sometimes. Whenever I was tired, I remembered the promise I had made to my family that I would make them proud of me and all the fatigue would go away. After two and a half years of hard work, I finished writing my doctoral thesis and submitted it to the university which was sent to examiners only after I completed the three-year period required to finish the degree as per the laws of the university. My thesis was sent for evaluation to an external examiner in America and another in Malaysia, and during the months I waited for the examiners' report, I was working with my principal supervisor as a research assistant on a different project. After the university obtained the reports from the examinees, a date was set for my discussion of my doctoral thesis. I received my PhD with distinction and was honored by the state king at the university's graduation ceremony. Also, I was the first student to obtain a PhD degree in the area at that time. After that I worked for a year at the university as a post-doc. During this time, I learned a lot and gained experience in publishing research papers and books, supervising bachelor's master's and doctoral students. *After this wonderful year, I returned to Yemen, and thus, kept my promise to my family of making them proud of me. I carried with me goals and dreams that I wanted to achieve in my country.*



## Return to Yemen

I obtained a job in the first week of my arrival in Yemen, and the position was that of a lecturer at a private university in the city where I lived with my family. Then I was appointed as head of the medical laboratory sciences department in the Faculty of Medicine, SU-Taiz. Two months later, I was selected as one of five winners of the 2014 Elsevier Foundation Award for Early Career Women Scientists in developing countries (Chemical Sciences). I cannot describe my feelings, and that of my family and neighbors, the moment I heard this wonderful news. I was shivering in my mother's arms with tears of joy in my eyes and I remembered my promise that I had made to my family and the difficulties I had faced in exile. Everything during the time of my studies was difficult. I remembered how my family was worried when I chose to study chemistry even though I disliked the subject, and how my colleagues laughed at me when I told them that I wanted to complete my higher education in chemistry. I reminded myself that this was one of the fruits of all my efforts, which I had started to achieve in reality, *I thanked God for all this*. I went to America to receive the award in a wonderful ceremony attended by a large gathering of people and journalists. On returning to Yemen, the local and foreign television channels began requesting appointments for interviews; requests also came from newspapers, magazines, and radio. Despite my happiness, I began to feel that the responsibility on me became greater. I had always stressed that I would not return to exile and would continue to live in my country with my family, friends, colleagues, and everyone I loved. I dreamed of achieving my goals in Yemen, including launching a program concerned with nutrition and food sciences, due to lack of this specialty in my country at that time. I started writing a project proposal to start this specialty at the university, which on submitting to the university, was accepted after consultations and several meetings. We started working on preparing the courses for this major with the help of my former Malaysian supervisor, who warned Yemen to provide assistance in setting up this department. After continuous effort and work, the applications of students for this department were opened. The department was named, "Therapeutic Nutrition", and I was very happy to achieve my first goal in my beloved country. I was chosen to be the head of this department as well and I was very happy to take up this job. They were energetic and smart students. In the first semester of this department, I decided to set up a nutrition



exhibition at the university and called it “Nutrition Camp”, to introduce the importance of healthy nutrition. We all worked hard at the university to make this exhibition a success. It was a wonderful exhibition that showcased the varied nutritional information and health tips on choosing the right type of food. The exhibition included many activities for the students of the Therapeutic Nutrition Department who were in their first semester, the most important of which was food products made by the students. Indeed, it was a successful exhibition as it was the first nutrition exhibition held in Yemen, but unfortunately it was the last academic activity in which I was involved in Yemen.

### **War in Yemen**

In March 2015, the war began in Yemen, and fear and panic began to fill the streets of Taiz, the city in which I lived. The situation started to get worse. We had to stay at home because of the unstable security situation, then the situation became worse than before, and we had to leave our house because the situation in the area we lived was becoming dangerous. I clearly remember the night we ran away from the house, with warplanes above us in the sky of Taiz city and bombings all around us. *Really terrifying*



*moments!* Because of the war, I lost many things in my life. I lost my job and lost nine members of my family and some of my students and employees. I lost our house, which was destroyed by the bombing, and were lucky to have left the house before it was destroyed.

For eight months I lived with my family in a small apartment outside our area. It was months filled with fear and terror because of the continuous bombing in the city and around us; there was no salaries, no electricity, no internet, no oil, not even clean drinking water. I had to find a solution to help my family apart from continuing my academic career. Since there was no internet or electricity, I used to charge my mobile phone in my car to be able to contact my former supervisor in Malaysia to help me out, but at the same time I was worried that the car would run out of oil, as the car needed to have fuel in case we had to flee again. My former supervisor was well aware of my situation and worked hard to help me obtain a fellowship from one of the organizations that assisted scientists in the warring countries. I finally

succeeded in obtaining the fellowship and was able to leave Yemen a few weeks just before the closure of Sana'a airport.

### **In Malaysia**

I returned to Malaysia after a very long and tiring trip. My former supervisor hosted me and became my direct mentor with financial support of That American organization (Scholar rescue fund) that supports scientists at risk to continue their academic journey outside their countries. I was happy that I was able to get out of Yemen and return to a country I knew so well as I had lived there for more than seven years before the war, and also that I would be returning to my academic work and be able to support my family financially. I was surrounded by some wonderful colleagues. I was back to my academic activities again and started writing a new project, we obtained funding, we started experiments, published research articles, wrote a book, contributed chapters in a few books, and also participated in local and international conferences. I started giving press interviews again to some international TV channels, radio, newspapers, and magazines, but this time as a refugee scholar fleeing from the war in Yemen. The American public radio interview motivated me to continue, especially after the interview titled *"She may be the most unstoppable scientist in the world"* was published.

After two years, I was looking for a new and better job opportunity, and so I started sending my CV to public and private universities in Malaysia. As I did not receive any response, I resorted to help from the same organization that had helped me over the past two years in Malaysia to search for a solution through them. They were so nice to me and gave me a link to another organization in America (Scholars at risk Network) that also helps scientists at risk. I started writing to them urgently because I had to leave Malaysia; my visa was about to expire. They were ready to help and started requesting some documents and some Skype interviews. They started contacting their network around the world and sending my file to look for a job opportunity for me. After two or three months, I received news from them that I had been accepted at Agder University in Norway as an associate professor.



## **In Norway**

I was very worried before I arrived in Norway because it was a completely different country from Yemen and Malaysia. There was a huge difference in culture, traditions, weather, language, and religion. My concerns faded away at my meeting with the first Norwegian person whom I met at the airport in Kristiansand city. She was the person responsible for me at the university and came to receive me at the airport with a beautiful smile and a warm welcome. I was amazed by her elegant manner of dealing with me; my worry began to fade away and I felt that I was wrong in my anxiety about coming to Norway. On the same day, she took me on a tour to introduce me to the area and how to buy essentials. The next day, she came to my apartment to take me to my workplace at the university. Surprisingly, my colleagues in the department were waiting for me with a wide smile and a very warm welcome.

After that, I encountered only a few routine difficulties that are faced by anyone who moves to a completely different and new country. One of these difficulties was language, although the Norwegians spoke fluent English, it was necessary to learn the Norwegian language in order to manage the affairs of one's life in Norway, and it was also important if one decided to obtain permanent residence and work in Norway. I studied the language and am still studying it to master it. I attended a course for learning how to work with Norwegians as the academic culture and work environment was completely different from what I was used to before. During the rehabilitation period, I continued my networking activities across the world. I supervised two PhD students, one in Yemen and the other in Malaysia, and published a few research articles. I became a member of some international organizations such as the Global Young Academy in Germany and TWAS in Italy in Italy and Germany. I sometimes had difficult times due to my concern for my family in Yemen, as I had not seen them for years, and did not know when I would be able to see them again, but I always found wonderful people around me, whether they were my Norwegian colleagues or my Palestinian friends, whom I had met in my new abode. After about six months, I started receiving invitations to participate in teaching with my colleagues in the department and in another department (science and technology) too, as well as invitations to give some public lectures inside and outside the university.

In addition, I became a member of the research center in the Nutrition department. At the end of 2018, I was chosen along with my administrator to be the best buddy-couple in the university for the year 2018, and at the end of 2019, I won the culture bridge builder award for the academic year 2019 and *I was surprised that the university called me the great ambassador of Agdar University.*



I was too focused on my work and in supporting my family in Yemen, but a few months before the end of my work contract at Agdar University, something happened that I did not expect, nor did any of the people around me because I was just focusing on my work and supporting my family in Yemen. Surprisingly, one of the Yemenis in the Norwegian capital, Oslo, which I visited one day to give a speech on the national occasion, asked to marry me. Indeed, we got married in Norway and I moved to live with him in the Norwegian capital, Oslo. He works in one of the research centers as a researcher. After the expiration of my contract, with the help of my previous responsible person and the current person responsible for me, and with the support of the same organization through which I was working at Agdar University, I got a new job at the University of Oslo and now I am in my second year at this university. My only dream right now is for the war in Yemen to end and for Yemen to be safe and stable, and to be able to visit my beloved family after spending years in exile without seeing them except sometimes on mobile screens.

## The Journey to Becoming Good Enough

Oon Chern Ein

GYA Alumna, Universiti Sains Malaysia

*“Obstacles are those frightful things you see when you take your eyes off your goal.” – Henry Ford.*

When I was little, I fell in love with dancing, and I also enjoyed designing my own clothes. I often looked forward to celebrations in school, because we would then have the opportunity to dress up and perform on stage. For me, it was an occasion to proudly show off my clothes, even if they were not sewn by the best tailor in town. Now, as a proud mother, I regularly observe my 3-year-old toddler burst into moves according to the rhythm of the music in the shopping malls. She does not care if her steps are misaligned or neither do the stares from strangers bother her. In fact, I cheer her on. Such is her confidence and poise, completely unscarred.

Upon graduation from my DPhil, I found new confidence. I had once considered being a (future) housewife, just like my close female friends who married young and gave up their jobs to care for their families. It was a normal societal expectation at that time, especially within certain communities.

I vividly remembered a taxi ride during one of my study holidays back in Malaysia. The driver candidly asked me ‘Why are you still studying? You should have been married off.’ I would be lying if I said I was the least worried that I would end up unmarried as I hit my three zero. I seemed to believe at that time that a woman's 'worth' declines with age due to the ticking biological clock. I did not understand what it meant to be empowered until I went abroad. Equipped with a DPhil from the University of Oxford, I realised that I have the means to influence a positive change.

When I first tried crafting my career as a scientist in molecular oncology, I was told that my work did not fit in. I was also regularly being compared to other peers who were praised for doing “better fitting” research. Under such circumstances, the newly found confidence quickly evaporated into thin air. As a young researcher who was eager to learn and advance this field, it was a confusing moment. There were times when I started to doubt myself.

*'Your work has no translatable outcome to be commercialised within ten years'.*

*'You are invisible here.'*

*'You do not fit in.'*

I had no direct scientific mentor, but thankfully I had helpful collaborators, not to mention encouraging friends and family too. I started seizing every opportunity that came my way. It was the only way for me to clamour for the prospect of building the research that I am passionate about and succeed in a limited resource setting. I anticipated an arduous journey ahead. I tried refocusing through international training attachments to assimilate into the new research environment. I was fortunate to receive the support from international organisations to fund my international attachments and collaborations to work with like-minded scientists to strengthen my credentials.

Being a woman also meant that I was racing against my biological clock. Applying for lab attachments to learn from the best often meant planning these commitments around pregnancy. Given limited funding opportunities to attend international conferences, I was not ready to let any chance slip when I suffered an impending miscarriage. After having cancelled my flight, I rebooked it within hours after being discharged from the hospital. I packed my antibiotics and braved myself for my trip to India alone. Although I had to nurse my wounds in the hotel in between scientific sessions, I felt victorious having been kindly reallocated my slot to speak. I was not ready to cry my eyes out in bed over the loss of an unborn child, or at least that was what I kept telling myself. I needed distractions.

I have started accepting the fact that there is never a right time to have children for a career woman. Twice I had nine-month pregnancies; fortunately they went well. At work, there were times when I had decisions made on my behalf just because I was carrying an unborn child, and thus automatically considered unfit for certain tasks. Three months of maternity leave, like others, but I was not able to stop worrying about paper rejections and resubmissions or untimely grant calls which were all due at the same time. I was still expected to deliver all the same at work. Fortunately, being a mother has taught me how to multitask. I suffer from mom guilt all the time, and I have to learn to prioritise with the addition of each child to the family.

Culture can influence leadership and communication styles. For some cultures, it is somewhat tolerable for men to treat women as less than equal, or at least the latter group is expected to obey. Unfortunately, this behaviour sometimes persists in the professional workforce. It could also be the title in front of the name, the rank, hierarchy or seniority that incites disrespectful treatments. I was told that this happens everywhere. Are we supposed to tolerate this behaviour as young scientists just so that we can have smoother career paths? Many years ago, my old, meek self was equally guilty of accepting this as a norm, only to realise now that there is another analogy for this - bullying. Fortunately, education and empowerment have given me the strength to stand up for myself under such circumstances.

Each of us has enormous potentials yet to be uncovered. These potentials will bloom if given the right opportunity at the right time. Sometimes, we are not aware of our gifts because we have allowed the past disappointments or pains to cloud our self-judgement. How many times have we been told that we were not good enough? How many times have we had negative comments thrown in our faces to degrade our self-worth? These would eventually cast doubts on the perception of who we are and what we can achieve. Motivation would ultimately be compromised. Slowly we retreat into the cave of insecurity which hampers the development of our more fabulous selves. The most detrimental part is that we build a wall of insecurity without realising it. We then lose our sense of purpose and direction.

Our words can construct, strengthen and give hope, but they also have the power to destroy. Through this experience, I have learned how not to be, to instead be a better scientist and leader. I believe that the experience has also spurred me to achieve what I have accomplished so far. It has been a long emotional roller coaster ride for sure, but I grew in character and wisdom. As long as we try our best, we are never a failure.



## Running Faster

**Amal Amin**

**GYA Alumna and Founding Member, Egypt**

My main challenge has always been wanting to do more than my capacity or more than would be possible in the time I have available time to fulfill my tasks efficiently. Usually, my schedule is busy and sometimes crowded with very long to-do lists. I am always troubled by having all 24 hours of the day schedule, and usually needing even more. Like many other women who are scientists and mothers, especially in developing countries, sometimes I find myself with unexpected challenges, duties and expectations from others.

This story started early in my life, when I was eager to be superior in my school because it was the time to focus on earning a place at a good college according to societal standards. So, I was studying longer hours with more lessons, training and activities to fulfil that target. Afterward, I had to be active in college as it was necessary to have good credentials to get a good future job and scholarships. When I failed at that once, I felt guilty about wasting my time and I tried to exert additional effort to compensate for that.

I even married at a younger age because elders said it was the right time to marry and to bear and raise children in a good way. Fortunately, I met the right person with whom to share our dreams, not only as spouse. Directly after graduation, I searched for a job and started my career, so as to not lose my spot in the line to become a researcher, as there was an age limit involving additional effort. Then, I had to complete pre-master courses and met the deadlines of obtaining master's degree in my early twenties and to get scholarships from prestigious funding organizations. After getting a good scholarship, for my PhD in Germany, I was working like an ongoing machine to act as good mother for my little daughter and a good researcher to obtain data in a shorter time to finish the PhD before the expected period.



### **Always, the pressure of timing**

Even, as an independent researcher, there was always the ghost of deadlines, deadlines for projects, reports, papers submission, attendance for conferences. So, as a researcher, I may work restlessly for days to meet all my deadlines and fulfill all my commitments efficiently. Sometimes, I am ready 24/7 for any emergency or conflict between family circumstances and work demands. Yes, over the years, with hard work I have managed to reach a relative work/life balance, but it works only in normal cases, whereas I must be ready for emergencies or abnormal events or even changes in the schedule which may affect that balance for days.

Additionally, in raising children, in my culture, whatever your career, you have to raise children in the right and best way you can, and the mother is considered as the main person responsible one for children even if that is with the cooperation of the father/spouse. So, sometimes, according to social standards, the real achievement for a mother is to have good children. Therefore, I repeat with them the same story as mine, as I would like for them good places in university, good jobs and good careers. I think we were forced to use time in a similar way, we were always running between our normal daily life routine, developing hobbies, playing sports/games and studying lessons. Additionally, I made extra effort to make some balance to save some of my personal life requirements among this busy exhausting schedule.

I have found my struggle with time is normal for working women in general and more drastic and frequent in women scientists, because of additional challenges related to the toughness of scientific fields and the high competitiveness within the scientific communities with its hard nature which require uniqueness for continuation and recognition. This translates into extra work racing with time. The problem increases over time to stay afloat keeping my mental and physical health within acceptable level.

Therefore, I always think that contributions and activities done by scientists away from science or related to science are recommended as a good way to relieve the pressure and to slow down a little. I think that is one of the reasons behind my personal willingness to do something else away from hard science but related to science in order to help myself and others to connect with society and others. Accordingly, I see networks and associations as very useful in exchanging experiences in different aspects and especially time management, which is very

crucial in any scientific career, especially if A WOMAN wants to be excellent in science and BALANCE THE RESPONSIBILITIES and her personal life at the same time IN TODAY'S SOCIETY. Really, time management is THE ONLY WAY TO MANAGE IT ALL SUCCESSFULLY.

Finally, I would say "Time isn't the main thing, it is the only thing" (Miles Davis).

## Escaping the War into Uncertainty

Oon Chern Ein

GYA Alumna, Universiti Sains Malaysia

*Being a mother is about discovering the strengths you never thought you had, and dealing with fears you never thought existed, yet when life presents you with mighty hurdles, you stand up tall and somehow survive them all.*

For many of us, we may have taken many things for granted. For Dr Ashwaq Hamid Salem Yehya, 39, a single mother of two from Yemen, her life has always been a roller coaster. Early marriage and familial commitments have always been her biggest challenge. Married at 22 after graduating from her bachelor studies, she became a proud mom at 23 but immediately fell pregnant again to deliver another healthy baby boy within the same year.

*'As a woman, I cannot travel out of Yemen without being accompanied by any man from my family (Mahram). Even after marriage, I cannot apply to pursue higher education without my husband's agreement. In order to obtain a scholarship from my university, I was placed in a long waiting list. The politicians are usually prioritised.'*

Ashwaq understood the importance of education and has sacrificed being away from her family in Yemen for the entire duration she did her PhD under my supervision in Malaysia. She was funded by the TWAS-Universiti Sains Malaysia Fellowship. It was no easy feat, during which her family members have fallen ill, and she could merely care for them from afar. She finally proudly graduated with a Dr title to add to her name.

According to Ashwaq, women scientists and researchers in Yemen face daily personal challenges and professional obstacles that make it difficult, if not impossible, for them to participate in research activities. Because of the war, her salary was delayed for 5-8 months, but it is not uncommon for her to receive only one month or two-months' salary per year (40000 Rial Yemeni = USD 60).

*'Hodiedah University was bombed and destroyed during the war. To continue the classes, we used a primary school nearby. There were no labs and no facilities to do research. Students follow the classes either verbally or on written papers. Online education is far from possible. The city has suffered from power cut since the war started. There was no support and no funding sent to my hometown (Hodeidah) because of the war.'*

*Her experience on gender inequality has also been debauched by the societal circumstances that allow Yemeni men to nullify the marriage at any time without any vindication. Conversely, a woman must endure a process of litigation in which they need to provide justifications for divorcing the man. In this case, the mother may lose custody of the children; however, the father is somewhat immunised from having his children removed from him.*

*'In addition, there is strong favouritism towards males when it comes to making familial decisions, as well as a high tolerance for violent behaviour towards women in general.'*

Ashwaq was persistent about finding a new life for herself and her kids, away from the war and the prejudicial treatments. Her most crucial goal was to provide a better future for her sons and save them from abduction by the soldiers of the Houthi movement.

*'I had to ask a formal letter from their father and have it officially validated by the court. Because of war, I had to travel to the south of Yemen (Aden), to generate the passports for my sons. I spent another two days at the border of Aden after spending two days travelling from my hometown. I was not allowed to enter Aden because I am from the north of Yemen. Every 30 minutes, we had to stop at some point for military checks. They searched for men older than 15 to be recruited into the regime. They checked all our bags for weapons and asked many questions about why we were travelling. I called my friends in Aden to permit me to enter. After I received their passports, I applied for the visa to Malaysia but travelled through Oman. Once I reached Oman airport, I felt relax and safe. We spent 18 days to arrive in Malaysia from my hometown finally. I brought my children here to provide them a safe environment and better education. Since the war started, the schools have stopped operating. They only stayed at home and ran for cover whenever the sirens wailed.'*

In Malaysia, Ashwaq faced difficulty securing a job in academia. The funding cut made it even more arduous. She survived using savings from her scholarship and worked temporarily as a lecturer at a private college.

*'Now I am working at a private company, but the salary is not enough for the rent, visa renewal and life expenses, especially if the kids or I fall sick. At times, I seek help from my friends. I try to keep our life as normal as I can. I have learned that I must not lose faith in myself. The most important thing is to stand up again after failure and never give up. When I face difficulties, I tell myself that challenges are not sent from above to destroy me. Challenges are for building and strengthening my characters.'*

Like many others, Ashwaq wishes to see Yemen recover from the war so that she could be with her family all under one roof.

*'I want to help the people back in my country by transferring my knowledge and experience to the young researchers to build this country again after the war.'*



Ashwaq and her two children in Yemen

## Conclusion

**Nafissa Ismail and Menattallah Elserafy**

**Co-leads of the GYA Women in Science working group (June 2020 - June 2022)**

We end this book with the hope that we were able to encourage women to follow their passion and to motivate them to pursue a career in science. Throughout your journey you will likely encounter individuals who will not support you, who will give you negative and destructive feedback. Do not let these comments discourage you. Remember that you are capable of achieving anything that you desire. You are not too ambitious. You are not selfish. Do not shy away from setting high goals for yourself, and put all the mechanisms in place that will help you achieve these goals. Surround yourself with supportive and encouraging individuals. Organize your schedule to allow you to reach an optimal work-life balance for yourself. The journey will not be easy. You will likely face challenges, failure, rejection, obstacles, biases, and discrimination. We all do. However, try not to let these challenges discourage you. Continue to work hard and persevere, and along the way, help and encourage other women around you. Guide them and mentor them. Together, we will make it and reach our goals! We stand united!

We are proud of every woman who decided to go after her dream no matter what!