

# WHAT WERE THE BIGGEST CHALLENGES YOU FACED IN YOUR JOURNEY TO THIS POINT AND HOW DID YOU OVERCOME THEM?

Farah Ishtiaq,  
Ecologist, Indian Institute of Science

In my early career stages, my family (especially my mother) wasn't very positive about my choice of career. My father was very supportive, but he died quite early on, the year I started my PhD. It has been a long battle to convince my mother that there is value in what I do, so what if it's not engineering or medical degree. With my persistence and determination, I think I overcame some of this. Later in my career, arbitrary rules such as age criteria on faculty positions in India have been a major hurdle in establishing my career but it has not been able to stop me.



Jugnu Jain,  
Entrepreneur, Sapien Biosciences

There have been many times in India that I had to fight eve-teasing (it's a mild word for something that is NOT mild), and gender discrimination. During my MSc at Pantnagar university, girls/women had to report back to the hostel by 9pm and not allowed in the library unlike boys who had access until the library closed at 11pm. When I insisted I be allowed the same privileges as boys

had, the University made my parents sign a letter that the University would not be held responsible for my safety on their campus and that I was using the library at my own risk. Boys harassed me daily by making lewd comments, leaving indecent drawings on my table, deflating my bicycle tires but I persisted through it all. Those 2 years toughened me and deepened my resolve to ignore naysayers and fight inequality. When I went to Cambridge, UK for my PhD, I was totally dependent financially on my scholarship which was barely enough to survive. We had to pinch pennies all the time, including not being able to afford calling home in India since it cost almost 3 pounds per minute. There were many lonely times where I missed the love and comforts of home, family and familiarity. At such times, I would remind myself that I came to the UK for a purpose and I must finish it and not give up. I cultivated hobbies and pursued many extra-curricular activities to keep myself busy, learn as much as I could and make the best use of my time in that country. There are many trials and tribulations in my entrepreneurial journey which can not be fitted into a paragraph here. One of the ways I cope is by pasting inspiring quotes and poems in my cupboards and other places where I will see them every day and recharge.

**Savita Ayyar**  
Research Management Consultant,  
Jaquaranda Tree

On several occasions, I have initiated work for which there was neither precedent in my own environment nor an immediate peer group for me to derive insights from. There were several systemic challenges on each of these occasions. Difficult as these moments were, help always arrived in the form of mentors, collaborators, colleagues and others. These situations also presented challenges within, with the little voice of doubt inside saying “You are not good enough” or that “that is too big a problem”. My family and mentors have played a huge role in helping me believe in myself and stay focussed.

**Smitha Hegde**  
Educator, NITTE University Centre  
for Science Education and Research

The lack of recognition of research as "work" in academics. Only teaching hours are counted and considered as full-time work. But all the extra hours put in are not even considered as "workload". However, the products of research such as papers, projects are very much desired by management in traditional colleges. Thus in my opinion, unless research work is recognised in workload, college

teachers will not be enthused to take up research along with teaching.

Meenakshi Munshi,  
Scientist 'G'/Adviser,  
Department of Biotechnology, Govt.  
of India

As a woman there are challenges at different levels and different layers of life. The biggest challenge begins at home itself when someone else decides your course of life. Hailing from a small town (I belong to Kashmir) has its own challenges and it is here I had to take a bold decision of leaving a permanent government job to pursue research as a career. All my relatives threw a fit and said that I have become arrogant by studying in Mumbai. I was happy with my decision but it was a tough to be on my own as I had no one to fall back on in case of problems which kept creeping in. But what kept me going was the strong belief that good things will happen and it is just a matter of time. Many times it was hard to deal with issues but I never regretted my decision, I strongly believe in God so when I am unable to figure out I just leave it to Him. The irony of the fate was such that I had to leave active research due to my health issues This led me to look for Plan B, so I did a degree in Journalism & Mass Communication. At times every day

was a struggle of different kind; with a family of my own, a small kid with a soft job and the worst part was I couldn't share my frustrations with anyone as it was my own decision of leaving a permanent government job and opting for a temporary job. The only thing which kept me going was the strong belief in self. The lesson I follow as a bible in my life is that if you want to succeed, work hard. Even if success doesn't come through, don't worry, at least you will have no regrets. Above all, I feel it is important to be a good human being - the rest will fall in place, it is just a matter of time

Dhanashree Paranjpe,  
Ecologist, Abasaheb Garware College

The biggest challenge has been coming face-to-face with gender bias, harassment and other unethical practices in scientific community. Not so long ago I have (first-hand) heard the following statements spoken by prominent scientists in reputed research institutes in India targeting various young women who were hard working, sincere and promising scientists - "Girls become useless to do science, their priorities change when they get married", "Oh- she got her name on the publication by flaunting xxxx in front of her boss", "I wouldn't have given her another year's extension

on this project if I had known that she is pregnant”, “Does she know what research means? Just because her mentor/ husband is a big shot scientist she gets to be a faculty here” and so on and so forth. I saw many of my female friends and colleagues put their personal lives on back burner and suffer just to prove that they are “worthy of doing science”, to prove that they are not “distracted” or become useless due to their marriage/ family responsibilities/ personal relationships. I saw a lot of this and other unethical practices during my time in India such as contempt/ disrespect for each other’s fields of science, publishing manipulated data, side-lining project assistants’ or students’ contribution in a publication, honorary authorships being given - it was disheartening to say the least.

I decided to quit not just research but even academic field after finishing my thesis. I took a break after my PhD, got married, went abroad, and did some soul searching. The “itch” of becoming an ecologist wouldn’t let me quit. With full support of my wonderful family, I started teaching at Univ. of California at Santa Cruz (UCSC), and then returned to research. I learned to block out nay-sayers. With a renewed confidence and fresh ideas, I returned to India on Ramalingaswami Re-entry Fellowship. I already knew that the

career break after PhD and resulting “gap” in my publication record is going to put me at disadvantage in hiring process- and it did! I was indirectly told in many institutes that I was above the age of being hired for a starting position- there are no written rules against hiring older candidates but somehow people are reluctant to do that. In short, I am past my “expiry date”. I chose a study system (Indian peafowl) that I had not worked on earlier during my PhD or postdoctoral research. So I was told that I am taking too much risk. My only answer is to show with data and publications, that I can build my independent research project without a “position”, without a mentor, working in a college set up which can offer me only basic infrastructure facilities and some freedom to choose my teaching load.

Suhita Nadkarni,  
Neurobiologist, IISER Pune

Getting the infrastructure needed for my lab to be up and running has been the most challenging component thus far. I had to learn the technical aspects of designing and setting up a high performance computational facility which initially was not part of my agenda and was a unplanned sink of time. High Performance Computing (HPC is a male dominated area and It was deeply frustrating to

experience the vendors continually ignoring my feedback but eager to please the two other male colleagues with whom I was making a combined purchase). It took more than two years and many iterations to have a system that is stable and finally delivers!

Devapriya Chattopadhyay,  
Paleobiologist, IISER Kolkata

One of the major challenges for me was to establish my research group and to keep it moving once I returned from USA. I had to understand the obstacles of setting up a laboratory from scratch which I was happily oblivious to. I also experienced the hardship of field-based studies in India. Developing a group of motivated students solved majority of the issues as they took the lead role in tackling the issues. Apart from these, another challenge that I faced throughout my academic career was a nagging confusion of whether I am being treated differently. For me, both success and failure because of my gender are equally disturbing. Because the society still has to go a long way before we really can treat everyone equally, there were reasons for such doubt. I don't think, I have overcome the challenge completely. I still ponder on this. There are instances where things did not go the way I hoped and discrimination played a role, I suspect. To me the only solution is to work really hard for the

love and thrill of the discovery alone. This is often hard without funding or infrastructure. But that is the only way out. And that is what I continue to do.

Bushra Ateeq,  
Molecular oncologist, IIT Kanpur

I won't say that there were no challenges, I had my share, particularly when I was searching for an independent faculty position in India. I was even questioned about my "academic pedigree" at one of the premier institutions during job interview. But I didn't let such unfounded cynicism dampen me, in fact that further strengthened me and in turn, it helped me take a step back, get more clarity and confidence, and gear-up for the next stage.

Sonam Mehrotra,  
Cancer biologist, ACTREC

Setting up collaborations in India. Bureaucracy and procedural delays. I overcome them by being very patient and following up.

Sarah Iqbal,  
Public engagement officer, Wellcome  
Trust/DBT India Alliance

I don't think I would call anything as the "biggest" challenge so far but these come close – struggle to find a good supervisor and funding both at

doctoral as well as postdoctoral level at foreign institutions, to find a job that would align with my interests (but I found one in the end!) and dealing with the uncertainty of entering a totally new field of work and unlearning many things that one had been trained in. The learning curve is steep, confidence is low, when you transition to a new field, but it helps to have an open mind and a desire to learn, unlearn and grow. In addition to these, in my current role, I am faced with new and really “unusual” challenges on a daily basis but they are also what keep me going every day.

**P Hemalatha Reddy,**  
Educator, Sri Venketeswara College

The biggest challenge is to establish a department at Undergraduate level where teaching would be interactive. Catering to the needs of brilliant students and inculcating interest in undergraduate research was my primary aim. Small research projects had to be introduced to make the students understand the flavour of research to begin with. Therefore my biggest challenge was to be able to get

research grants to fund my research and in turn to train students. There were no student grants and funding schemes like STAR projects specially for UG colleges available at that time. I had to get the grant through the usual R&D channels. Convincing the board not only that my science is good enough to be funded, but also that I would be able to carry out quality research in an undergraduate college was quite a challenge. I will not say I succeeded every time, but I take pride in being able to make them sit upright and take note of my work. Today after almost fifteen years Undergraduate research is an integral part of good science education across the nation.

**Lipika Sahoo,**  
Intellectual Property Professional  
Lifeintellect consultancy Pvt Ltd

Being married and having kid, and doing PhD especially in Bioscience is tough. Many a times thought of quitting but somehow with family support, understanding husband and bit of determination helped me to sail through.