

**Dutt and Shilpee Lab**  
**Newsletter**  
**January 2019**



# Start of the year with great food, fun and fabulous company



**Cheers to the new beginnings!!**



**And best wishes for the future ahead...**

## Creative corner

YourQuote.in

Beshaq gul se hi namoodar  
hai gulistaan

Yahi baat kahi baughan  
ne , to patti , Kaante , jad,  
shakh, tana, sab murjhane  
Lage

– Suhail Ahmad "Shaad"

# Congratulations Jacinth

for being awarded the Best Short Talk at the Indo-US proteo-genomics conference



# *In conversation with...Jacinth Rajendra*

*Compiled by the Newsletter Team*

## ***General Facts***

1. By birth, my name is: Jacinth Sweetlyn Beatrice Rajendra
2. Friends call me: Jaci
3. I was born on: 14<sup>th</sup> June 1990
4. My childhood was spent at: Delhi

## ***Personal Life***

1. *Can you describe any one ever-lasting memory about your childhood?*

One ever lasting memory of my childhood is the few years I got to spend with my mother. My best moments with her were the days before my birthdays and every Christmas when I used to sit beside her and watch her bake tasty cakes for the special day. My aim was not to learn how to bake a cake but I was more interested in tasting the remains of the cake batter after the last cake would be placed inside the oven! Now I wish I had paid more attention to learn baking. ☺

2. *How was your college life? And, what did you enjoy the most?*

My college life was very simple and non-adventurous in spite of being a Delhi based college girl in Institute of Home Economics, University of Delhi. It was a girl's college and I came from a co-ed school. Well, that really didn't make a difference. Long practical, long lectures, travelling with heavy books of biochemistry in DTC buses were some of the common features of my college life. In between this monotonous and studious schedule me and my closest buddy in college – Shalini (De Lab) would still find simple ways to keep ourselves happy. Those happy moments would be relishing garam garam samosas and kadak chai on cold winter days, having chana choor garam almost every evening after college because that was the only thing available outside our secluded college campus.

3. *As a child/teenager, what did you aspire to become in life? Any reasons associated with it?*

As a teenager I wanted to become an engineer. Honestly, at that age I didn't even understand the exact role of an engineer. This thought was put in me by my parents and relatives who had observed my inquisitive nature and the skill to repair anything that was not working at home. Since I was good in academics they used to say she will become an engineer one day. I believed them and started to aim to be an engineer. However, Class XI was an eye opener for me when I realized engineering can never be my passion.

4. *Would you like to state a person or an event that has inspired/influenced your life?*

It's difficult to state one person or one event which has inspired or influenced me. I believe, in a life where we are subject to so many predictable and unpredictable phases, the key to embrace those phases is to be able to draw inspiration from the ongoing changes around us at that very moment. For example, when I was about 9 years old I drew inspiration from my mother who fought cancer with immense faith and strength. Even though I saw her succumb to it when I was 12 yrs old I was influenced to live a life of faith

no matter how hopeless the situation was around me. After that phase I was influenced by my elder sister who inspired me to strive for perfection and excellence in no matter what I do. Today at present, I draw inspiration from my loving father who has been an overcomer in spite of his physical ailments. His attitude of enjoying the simplest things of life such as a good meal, good music or reading something meaningful and knowledgeable shows me every day that life is not always about achieving fame and success. Life is also about being able to be happy and peaceful no matter what you have in your hand or what circumstance you are in.

5. *Do you have any hobbies or passion apart from research?*

Yes I do. Apart from research I love to write down my philosophical thoughts. I enjoy music. Earphones and my favorite playlist are lifelines for me at any given time of the day. The best part is that I can use them along with my research. I am also passionate about my spiritual beliefs and faith. The best part of my day is when I get to sit peacefully in one corner of my room with a cup of tea/coffee and study biblical passages.

6. *How do you keep calm in this stressful journey? What is secret behind it?*

Calm and Me? Hahahhaa..Please don't judge a book by its cover!! I get very hassled and agitated when there is something important coming up or when something goes wrong. It's just that only the people who have worked closely with me have seen it. But eventually I do calm down. I calm myself by either going to a quiet place and pouring out everything in prayer (with tears ☺) or I speak to myself through the situation. If I am not in a state to handle it myself then I make sure that I talk it out with some of my closed ones whom I know will not feed my emotions but would rather change my perspective and encourage me to move ahead of that situation. So the secret is to actually share your stress with the right people over a cup of coffee/tea. Never seclude yourself when you are stressed.

### ***Science and Philosophy***

1. *In your opinion, what is research?*

Research according to me is to question the undisturbed and unconquered facts with a logical mindset and working towards answering it. I quote what I have on my working bench – search continues until all the answers are found. Research begins when a problem is identified and there is a passion to resolve it with knowledge and wisdom.

2. *Why did you choose to join the Shilpee laboratory for pursuing your Ph.D.?*

I chose to join Shilpee Lab firstly because of the interaction I had with Shilpee Ma'am. I found her to be a very approachable guide. The enthusiasm and passion with which she explained to me both the projects really motivated me to take up a project in Shilpee lab. I was a fresh M.Sc pass out and at that time honestly speaking I had no idea how to judge a PI or a lab for a Ph.D project. All I knew when I joined ACTREC was that I want to do cancer research. The words "Leukemia", "Stem Cells", "Most lethal brain tumor – Glioblastoma", "Radioresistance and recurrence" attracted me towards Shilpee Lab. That's why even though my first preference was the leukemia project I didn't mind taking the GBM project when ma'am told me that she has already given the leukemia project to Sameer. For me all that mattered was that as long as the question is about any cancer I will work on it.

3. *Describe the work culture you have experienced in Shilpee lab, and what are the things which should be continued or which should not?*

Working in Shilpee lab trained me to address scientific questions and do research multi-directionally. I got various opportunities to collaborate within the lab and outside the lab which sculpted me to be open to learn and explore new scientific perspectives. This should continue in Shilpee lab and students should be open to grab any opportunity that comes their way. The work culture for me has always been friendly and supportive. Of course there were moments of high and low in the lab but that actually trained me in interpersonal relationships which is also equally important in our field. I was lucky that I found the lab atmosphere very comfortable which allowed me to be myself. There were pros and cons for it. The cons were that I got to know my own weaknesses and shortcomings which helped me analyze myself and improve accordingly. One thing that I would encourage my former lab members to inculcate is to share and discuss their scientific problems/questions with one another more openly. Try to encourage one another and build each other up even when you critically look at the other person's work. Stay positive and don't let the failures ruin your motivation or perspective because it eventually effects the lab atmosphere.

4. *What has kept you motivated to pursue research?*

The reason why I started research has kept me motivated to pursue research. I always wanted to be only in cancer research because I lost my mother due to breast cancer and I wanted to be of some use to the cancer afflicted patients. Each time I found it tough during my Ph.D. I would take a stroll among the patients in ACTREC. When tears would fill my eyes I would tell myself that my tears won't help these patients but some day my efforts in the lab will. That motivated me to work hard even when I didn't see fruitful results of my efforts for months and couple of years.

5. *What have been the most (a) exciting and (b) challenging scientific question you have had the opportunity to address in your Ph.D.?*

The most exciting question was my primary objective itself i.e. to identify novel differential proteins in the residual resistant and recurrent cells. It was not about the approach but the answers it would give to understand the biology of radio-resistance and recurrence which was exciting. The challenging part was the big 2D gels that I had to run in my first year when I hadn't even run a simple SDS PAGE gel. The challenges didn't end when I adopted a different proteomics approach. The real challenge was to identify the essential target in the RR cells due to which I had to explore many proteins to identify novel targets. The exciting and thrilling phase was when the time came to publish this data. I can never forget those months in which I had to do two independent in vivo experiments without having much experience with animal studies. The most challenging scientific question for me unfolded during the end of my Ph.D. when integrin beta 5 showed unexpected results w.r.t paxillin in the recurrent population. Although, working with proteins like DCLK3, MMP8, ARIH2 and 14-3-3 zeta unfolded different scientific problems which are still open ends that need to be explored.



6. *Can you describe in brief your experiences of your Ph.D. tenure? And, what are your future plans?*

In one word my Ph.D. experience was a roller coaster ride. I have failed more than I succeeded which taught me more than what I would have learned if it was a smooth phase. It was a really humbling experience which made me realize how vast scientific knowledge is and how much is left to be explored. I plan to pursue research in cancer biology and be part of a basic and translational team.