



SEPTEMBER 12 Q&A

NEW FACULTY PERSPECTIVE PANEL

Q. What differences did you find between the academic system in India and USA? What was the biggest adjustment you had to make? (asked by Krishna Pillutla)

A. There is significant paperwork for procurements, manpower, bill processing, much more than I had seen in the US.

Q. What are the difficulties you faced while applications and getting a position in India?

A. Not all institutes will be open to hosting fellowships (RLS/DST Inspire). You will need to find those that are.

A. Implementation of DST Inspire faculty position differs in institutions so many not open/ implement as a super postdoc.

Q. What is one thing you wish you knew before applying?

A. There is a vibrant Indian science community on Twitter. I would have started the collaborations and connections early.

Q. How do you find motivated students in India?

A. One way is to teach a course really well. You connect with many potentially good students and they “see” how you approach any problem.

A. Not an issue, we need to account for their career goals too. The PI-student dynamic has changed in India. Its an equal stakeholder team now.

Q. Competition or collaboration. Creativity or productivity. Is it a race or doing what you love? Less than 40 or greater than 40 years. What is the way ahead?

A. I would do what I love to do. Who cares if it's a race...

Q. How easy is to have cross collaborations between academic institutions and national labs/ industry? And how do you come across such. (asked by Ranga Rohit Seemakurthi)

A. No major challenges. Just have to identify the right people for the project.

Q. Please comment how did you establish connections (especially with people out of India for long time for thier PhDs and Postdocs)?

A. Please get on Twitter, it is a great place for Indian science connections and colleagues!

Q. While doing Phd-postdocs abroad it is easy to lose connection with Indian academic system. How were you able to reconnect to the landscape during your job search? Were there any specific steps that you took? (asked by Aayushi Oberoi)

A. Looking out for research (labs in India) in our field of interest, and contact them for informal talks/visits to their labs.

Q. Apart from your research contribution, what experiences during your postdoctoral tenure set you apart from others in being recruited? International fellowships? Membership in academic societies?

A. All will help, be the scientist you want to be!

Q. What steps did you take 2-4 years before you applied for positions? How did you start approaching contacts or make contacts?

A. Start applying for RLS/DST Inspire etc. Takes 1-2 years for it to all come together.

Q. How did you prepare for mentoring students? Is there a difference in the system of intake in US and India? (Jithesh Vijayan)

A. No way to prepare for this. Just follow the mantra 'I will do it better than I saw it'. Try and always make it a win-win situation.

Q. As female candidates...did you go through any added struggle with the usual hardships of navigating your career?

A. Not sure if it was the woman aspect or that I did not have any connections or insight into Indian science. So I would say reconnecting is critical.

A. There will always be people who ask you "inappropriate" questions so you have learn to handle that.

Q. What struggles did you face after coming back? And what were the unique opportunities you found in India that you wouldn't have abroad?

- A. There are MANY unexpected opportunities - science communication, policy, outreach, contributing to an ecosystem you are passionate about. These things are harder to do as immigrants/expatriates.

Q. What's the biggest difference between the research environment in the US/Europe and India? Student/postdoc quality, access to reagents/time to get reagents, instrument access, journal access?

- A. In my opinion, it is dealing with administrative / paperwork overload. This slows down things some.
Instrument access has not been an issue.
Journal access all institutes do not have.

Q. What are the major constraints about sharing scientific instruments with other research groups in an Indian university/research institution? Is it practically feasible? (asked by Ananya Sen)

- A. I've often had to approach institutions for instruments and I have had no issues setting up collaborations to use them. Communicating expectations upfront (authorship, reagent / resource sharing) to avoid bad relations is crucial.

Q. What are the advantages and disadvantages of applying to newer IITs like Dharwad or Palakkad? One major issue for an experimental researcher like me is the lack of infrastructure. Also as a follow up, how easy or tough is it to transition from an established NIT or newer IITs to the big league IITM or B or IISc? Is that even a possibility?

- A. Not a problem as such as long as you are productive enough and a stellar CV..
But, generally transitions happen in the first 2-3 years, after that it becomes difficult..

Q. How much say does a new faculty have in how the department and the institute functions? Can a new faculty suggest new, 'better' things? (asked by Anik Chaturvedi)

- A. I've had a lot of opportunities to suggest improvements to functioning, syllabus and considerable in general because I bring a unique research perspective to a primarily teaching institute. This has been tremendous for my career growth! This might differ in other places, though.

Q. How much time did it take you to set up the lab, get moved into housing etc., just to get settled in general? How helpful was the institute and department administration in facilitating this? (asked by Anik Chaturvedi)

- A. This is very subjective. It all depends upon where you join. Organizations work very differently.

Q. I wanted to ask if you're doing translational or clinical research, eg. in Dr Kaushik's work - how easy or difficult has it been to work with hospitals or tie up with them for your research? Has it impacted or delayed your proposal? (asked by Awanti Sambarey)

A. The usual challenges I would say. But doctors are very keen to collaborate as I have seen. While I don't have clinical projects running, I do have a few grants which I have proposed clinical work.

Q. After making the move, was there a significant shift in your scientific expectations. If yes, how did you adapt? (asked by Shachi Mittal)

A. Yes there will be. One has to be agile on this front. Projects may have to be adapted. I overcame this by changing gears slightly to get few quick publications, if bigger projects were slowing down.

Q. How do you compare the ease of getting project funding in US as compared to India, particularly for projects where the budget required is large.

A. A good project will have a great chance of funding in India. Personal experience.

Q. If you (the newly joined faculty members) are a member of the recruitment committee, what factor(s) would you look for in an applicant? Would you give more stress on publication record or a well-crafted and viable research plan? (asked by Sumanta Sarkar)

A. Personally I would give 60% weight to research plan.

Q. Hi, My name is Mahita. I am a postdoctoral researcher in the US, at Dartmouth College working on antibody repertoire analysis. I did my PhD from NCBS, Bangalore. During my postdoc, I have realised that there is a lot of scope and potential in India in the area of immune responses to infection and vaccination., including antibody repertoire sequencing. Basically, the gist is to collect longitudinal blood samples from different cohorts of people, isolate PBMCs and sequence the BCRs (B-cell receptors) and antibody VH and VL chains using next generation sequencing technologies (10x Genomics). Analyzing these antibody repertoires will provide insights into the kind of antigen-specific antibodies produced by individuals. However, this kind of research requires different groups of people (field scientists/clinicians, bioinformaticians, molecular/cell biologists). to coordinate with one another. I believe this research will be immensely useful for the Indian community owing to its diversity. (asked by Mahita Jarjapu)

A. Write to me and Dr. Dipyaman Ganguly @ CSIR-IICB

Q. What is the feasibility of forming such a kind of consortium in India? (asked by Mahita Jarjapu)

A. Very feasible!

Q. During the selection process for assistant professor positions, how much importance is given to candidates who have already received doctoral/postdoctoral fellowships in their career? Is it difficult to get an assistant professor position with no prior funding awards/fellowships? (asked by Ananya Sen)

A. Not really at least in engineering.. but having a postdoctoral fellowship will certainly help your cause..

Q. Do you think it is better to apply for industry jobs in India if you have crossed 35 age barrier or there is still hope outside industry?

A. There is. Keep trying.

Q. Is there a way where temporarily returning grad students/postdocs/senior scientists etc (to visit family etc), can connect to researchers at Indian institutes? Maybe give a quick seminar or chat over coffee? Are there available platforms that can help us do so? I will be very much interested! (asked by Milind Singh)

A. Yes very much, reach out to us or express interest on Twitter.

Q. How to go about informational interviews in India while on a visit?

A. Email/Twitter/Network!

Q. What are the things that institutes in India are looking for in an prospective faculty? (asked by Saideep Singh)

A. Varies hugely across institute. Research program, funding, publications.

Q. I am a computational systems biologist. There are very institutes/departments in India that actively do systems biology research.

How is the response of employers for new fields (not popular in present research) appreciated by institutes/universities/colleges in India? Do they support new technologies? While writing a research plan/statement how to convince the potential employer the importance of my work? (asked by Abhishek Subramanian)

A. I think computational biology is revered these days in here...we don't have too many who can bring new insights around..please do check institutes that perform research

on your choicest topic..and write to them...you got to take the lead, don't wait for them to find you..

- A. It depends on the place, but I (coming from bioinformatics/computational biology background) find a general interest for the interdisciplinary research (and also depends how we pitch in our research proposal)

Q. I have done my doctorate studies in India and am currently doing my postdoc in the United States. I see first-hand that there are certain fundamental differences to doing science in both places. For example, the proportion of funding from government versus private funds. What are some of the major problems and also advantages that you have faced as a scientist in India versus abroad. This would be very useful to some of us who are still debating the shift back to India. (asked by Giselle Fernandes)

- A. Each side has pros and cons...difficult to touch upon each of them here...

Q. Besides direct connections, can we rely on the rolling advertisements only? Or do we need to have some connections for this advertisement. (asked by Balasaheb Sonawane)

- A. Rolling advertisements are usually open to all.

Q. How do you compare teaching experience in the US (or other foreign country where you did your PhD and/or postdoc) with that in India? (asked by Ahanjit Bhattacharya)

- A. Pretty similar, in my experience. Curriculum development, syllabus planning, etc.

Q. Is it possible to get a job in India without any connection?

- A. Absolutely yes!

Q. 5 years research plan in biological sciences: Fundamental questions versus translational science, which one will get more attention? (asked by Tofayel Ahmed)

- A. No specific answer, has to be a solid proposal that is all.

Q. Any advice or tips for introverts for networking - how is it different for India/ Indian scientists? For those of us who are introverted or those who may not be familiar with Indian culture for any reason?

- A. Social media will help! Also networking is not only for extroverts. I am better on social media than I am in person ;)

Q. I am curious if the panelists (other than Dr Ratnam) tried for faculty positions outside India and how were their experiences? (asked by Kanchan Gupta)

A. I never tried. It was not an option for me, I had to come back — no other choice, so never did.

Q. '@panelists: For re-entry fellowships - would you contact the directors of the institutes if you are interested or would you write to some faculty member who works in your research area? (asked by Subramanian Sankaranarayanan)

A. Write to a faculty member first, then write to the director

Q. I would like to get a personal insight from the panelist(s) (to whom it may apply) who applied for position after 35 years of age. In terms of challenges, they faced? (asked by Mamta Rai)

A. Applied before 35 years of age so cannot comment, sorry!

A. Grants/Fellowships do have age limits. They will be different across the grants.

Q. How do you find labs within your institute with regard to collaboration?

A. This will happen organic.

Q. How important is having a teaching plan as part of your application package? To what detail does it need to be? (asked by Rohit Kongari)

A. Helps a lot! Will make it very strong!

Q. As a postdoc and grad student we are not taught how to negotiate assistant professor positions. How did you start learning and training yourself about this process in Indian context? (asked by Ananya Sen)

A. No room to negotiate if on a fellowship.

Q. Does the "quality of student" as they say, ever drove your decision to select an institute to join as a faculty or was that ever a deciding factor? (asked by Saumya Gulati)

A. No, students are very good quality. They do need good mentorship.

Q. Hi Dr. Kaushik, So far with majority of my online applications, I did not receive any reply (some are more than an year). I am also out of India for a decade now after my MSc. What I learned that you need some connections. How could establish the connections if I don't know anybody and I have no research collaborator in India?

A. Not connections as much as understanding the ecosystem. Giving talk will help.

Q. Actually, I gave couple of interviews and they have selected me and put me on waiting list 1. But I never got any position. when I checked back on that institute website and figure it out, they have selected the internal candidate. So, that's was my bad luck. Still I am applying with hope.

A. Keep applying!

*Q. Can you negotiate startup grants before accepting offers in India?
(asked by Srinu Ramakrishnan)*

A. Yes, it is possible.

Q. '@Arnob What are major stages of IIT Engineering Interview process? Can you describe the stages and what the panelists/search committee members are looking for? (asked by Punnag Chatterjee)

A. Sure.. there are three stages.. first stage, you apply to a department.. here your CV, research statement will be important.. CV would be the most important.. you need at least 3 journal papers.. if your CV is very good, unless they have too many profs. of similar area they will recommend to the next stage..
in the next stage, you have to give a research presentation and may be a teaching presentation..
in the teaching presentation they will be looking for whether you have clear understanding of very basic things..
last stage, you will appear to an interview with a panel (consisting of faculties all over india),, they will mostly ask about your vision and some teaching subjects you want to teach

Q. '@Arnob: Thanks for the insight. Can you please elaborate on the 3rd stage of the interview process? (asked by Punnag Chatterjee)

A. In the 3rd stage, every IIT builds a panel of a few professors (some of those will be in your area), they will ask very basic questions like what your research vision is, what are the courses you will teach. I would say don't worry too much about stage 3.. seldom candidates are rejected in stage 3..

Q. What are the advantages/disadvantages to join private universities over public university in terms of getting funding, availability of resources and job stability? (asked by Mather Khan)

A. Will vary a lot depending on the institute. No specific answer.

Q. '@Prof. Polley: considering cryoem, what facilities are available in Bose Institute? How does one screen biochemically purified samples on a regular basis? (asked by Tofayel Ahmed)

A. So far we have no facility. I have been knocking doors of every funding agency since I came back. Still trying. So far I have used NCBS and IISc facilities, but it's not a pragmatic choice, even though they are very helpful. I am an optimist, hopefully we'll get one someday in the future.

Q. I know this may be a loaded Q, but what are your lessons in the Indian context? may be the few key points. (asked by Jithesh Vijayan)

*A. - There are unique opportunities
- The challenges are there but the joys are many!*

Q. Can the panelists elaborate on "probation period"/tenure system currently in place in India?

A. Varies across institutes!

Q. How and when you approached your sponsor or host institute while applying for re-entry fellowships? Is it after your formal job interview? Do the institutes respond promptly and stick to grant deadlines?

A. They do, I approached before I returned to India. They were very receptive.

Q. I do not have a teaching experience. However I have mentored undergrads, and grads in labs I worked for. Does that count? (asked by Mamta Rai)

A. Yes sure! Will be a very good component of the application.

Q. When does the tenure track time line start? Is it right after getting the re-entry fellowship or after getting a position in the department.

A. There is no timeline. But the fellowship five years starts as soon as you activate.

Q. When you don't have much connections in India, how do you initiate the contact? Will unsolicited emails be responded to? (asked by Prakash Sista)

A. Yes could be. But reach out wide.

Q. What are some ways we can maintain our networks? (Apologies if this is a very basic question, I am an undergrad from India)

A. Social media, giving webinar talks can help.

Q. When you frame research statements, is there a typical length? I have seen that these vary between 2-6 pages. Thanks (asked by Shatadru Chakravarty)

A. Varies across grants. No specific answer.

Q. I put forth a proposal but some expts I do not have expertise for but willing to collaborate. Would that be an issue to not have expertise when applying for fellowship/proposal. (asked by Mamta Rai)

A. If some part of the research proposal/questions where you apply for your expertise, and other part where you try a new area, with the help of collaboration. That kind of combination should be fine (in my opinion).

Q. What is the usual process of transition from one of these fellowships to a permanent faculty? (Asked by Sourav Kumar Dey)

A. Institute has to open a position, this is long and often complicated. So there is no guarantee.

Q. '@ Dr. Sabarinathan - NCBS doesn't host re-entry fellowships correct? (asked by Subramanian Sankaranarayanan)

A. Sorry, I don't know about this. You are welcome to write to the recruitment office about this.

Q. Can the panelists please give some pointers, do's and don'ts on drafting the research proposal? (asked by Sandhya Ganesan)

A. Be reasonable about timelines/facilities in your host institute. Do this homework. Don't make it too ambitious!

Q. Was job stability a factor in your decision to move back to India? How much did it influence your decision?

A. This is a very personal factor. Varies depending on single/double income, etc.

Q. Some universities/institutes put you on a probation period when you join. Is that different from the tenure system?

A. Yes, in case of tenure system this probation period is inclusive of the tenure time. This might differ for different places.

Q. If I have joined a faculty position can I still apply for some of these fellowships? (asked by Sourav Kumar Dey)

A. Yes - there may be some eligibility to check.

Q. Can we land a permanent position directly after post-doc? In most of the US universities, it is a tenure track with no guarantee of becoming an associate professor. I was just assuming it is the same in India. (asked by Ranga Rohit Seemakurthi)

A. Yes, this is possible in India.

Q. Is there a database or a document with the details of all grants with deadlines and timelines (for example what can be applied at what stage of your career), and also awards (asked by Kalki Kukreja)

A. Not so much, see DBT, DST, CSIR websites.

Q. '@Kaushik and @Rege: Is it important to structure your independent proposal to be different from your earlier work? Thank you. (asked by Debarati Bandyopadhyay)

A. It helps, I did. Also, competing with your previous lab is a no-show. So better to branch out on one's own.

A. There needs to be some overlap with your previous work (that's where you have shown published success) but clear independence in your research plan for the future is a certainty, in my opinion.

Q. As a new faculty, what is your experience on the success rate of research funding from DBT, DST, etc?

A. Depends on the grant, apply within your career stage. Advanced grants may need to see success from your independent research program, but early-career are well within reach.

Q. It might not be feasible for me to teach. How are applications without teaching statements considered by research institutes? Do institutes that place strong emphasis on research than teaching, still give lot of importance to the teaching statement? (asked by Mahita Jarjapu)

A. Mentoring undergrads and PhDs is also good.

Q. Thanks Dr Karishma. Do you get reviewer comments for the grants submitted like in USA?

A. Yes you do. They are helpful.

Q. How is the publication landscape in India? How is the monetary support for that? Also where you publish, is that affected if you move to India and does that impact your international impact and collaborations?

A. Publication is similar to elsewhere in my opinion.