Highlights and outcomes of the student panel discussion (conducted as part of ID 6020) on

(i) Life of a research scholar @ IITM, (ii) Planning for a positive research experience

Date: 16-09-2017, Saturday, 10.30am-12 noon; **Venue**: CRC 101, 102

Panel composition: Chandan Bose (AM, 4th year), Suchetana Gupta (BT, 5th year), Dr. Vipin B (DoMS, recent graduate), Jino Johny (DoMS, 5th year), Dinesh (OE, 5th year)

ID 6020 coordinators: Prof. Mukesh Doble (BT), Prof. Sreeram Kalpathy, Dr. Tiju Thomas

Student participants: registrants of ID 6020, Aug-Nov 2017

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The discussion was about the following 2 key issues:

- **Life of research scholar at IITM.**
- **Preparing and planning for a positive research experience.**

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A question bank was created by <u>asking all the registrants</u> to send their questions and concerns to relevant class representatives (CRs). Broadly student's questions were to do with :

(a) development of an **appropriate mindset** (for research & for life @ IITM).

(b) logistical and **skill/time/energy management** aspects.

(c) **human need of the student** to ensure that research becomes a positive experience.

(d) understanding **institutional mechanisms** for (i) addressing issues on a need basis, and (ii) ensuring continuous development of student's skill set relevant for research.

The panelists, from various departments and with varying degrees of experience (including one who had just submitted his thesis & defended) were asked to discuss aspects of (a-d) that touched upon their lives and that of their friends/acquaintances.

The summary of the panel discussion is given below:

A. Linguistic and cultural challenges:

- Students often face linguistic and cultural challenges, particularly when they come from a **societal or academic setting** that is very different from IITM.
- Making **friends among peer** was found to be the **most helpful** way to equilibrate with the new academic setting research students find themselves in.
- Students found learning the local language and **development of cross-cultural friendships** particularly enriching to their educational experience.
- Interdisciplinary (ID) students, in particular, & others who have made a **disciplinary transition(s)**, have a genuine need to understand and appreciate newer academic cultures (specific to administering department, and participating department(s)).
  Hence it was recommended that they **spend more time discussing with their advisors**, and sensitize them about their specific needs. Suitable **pedagogic study material**, **sensitization of the participating departments** etc by the DCC/advisors and seniors could help.
- ID students reported initial transitional difficulties, but most have a very **high level of satisfaction** with opportunities to learn **across disciplinary barriers**, in the process picking up unique skills.

B. Gender related issues:

- **Work-life balance** was identified as a key.
- Students (regardless of self-identified gender) reported **familial expectations** (eg. marriage) that at times made it challenging for them to focus on work. However most **students** who reported and discussed this issue, have navigated this space successfully, and report the need for **clarity of thinking**.
- A panelist seemed to advocate timing marriage/partnership carefully, at least until PhD thesis submission gets done (s/he said so based on her own experience). However many

expressed concerns; there after most students and panelists converged on the fact that being **realistic**, and **managing life** so that both **personal** and **professional commitments** are **not compromised** are essential. What works for one may not work for another. Hence people were encouraged to exercise **their own volition** and **discretion**, and ensure viable life decisions.

In all cases, **lab mates and friends** seem to have a big impact in ensuring balance and wise decision making in a research scholar's life.

- Transitions often come with **emotional challenges** associated with managing **non-platonic relationships**, especially those that already exist before coming to IITM. Navigating that space in a mature and deliberate manner is essential, to avoid loss of time and energy; and for avoiding emotional fatigue.

C. Interpersonal relationships and conflict resolutions:

- There is always a finite probability of conflict at work space (could be with lab mates, advisor(s), instructor(s) etc). These conflicts could be due to (i) work culture mismatch, (ii) expectation gaps between advisor and advisee, (iii) emotional fatigue due to the persistence of the problem at hand, (iv) transitions in the group and in the student etc. (for eg. the lab's focus may shift from what it originally was when the scholar joined).

- To avoid conflicts, it is highly recommended that **channels of communication** with lab mates, advisor(s), and DC committee members be kept open and transparent.

- "**Expectation gap**" between the student and advisor may be minimized through constant interaction, and by **soliciting feedback on work**, in a very regular basis.

- **Time management**, planning, and relevant **skill-set development** seems critical for the general well being of the scholar. Having deficit in any of these could add to stress, **increased irritability**, and increase in the possibility of conflict.

- Having a **healthy personal and professional relationship**(s) at work is a skill, that needs some genuine and consistent work. Often times developing a good **work ethic** is essential, and may need real effort.

D. Academic challenges:

- Take courses in a logical sequence and **avoid course-overload**.

- Focusing on **deep learning** helps with **scholarly thinking**, and makes the scholar more independent (and in some cases quite **creative**!).

- It is better to avoid hurried completion of courses (unless the DCC thinks otherwise). Courses are better taken, when done purposively.

- **Multi-tasking** (an aspect of **time management**) is an essential skill for research scholars today. Hence knowing how to switch modes, and do justice to all courses one has signed up for is essential.

- It is important to recall, all the time, that research scholars are expected to have **both breadth and depth** in their chosen fields. The connection between their work and that of others is increasingly important today. Course work facilitates this, but consistent study habits and willingness to engage with scholarly literature are essential.

- Knowing the **work of your lab mates/ friends** etc gives insights that are invaluable. Also understanding the work and skills of your group mates enables **timely advise and help**, as and when one is stuck.

** The general observation is that many students face challenges in developing **critical thinking** and **academic writing**. English **grammar** is also a specific challenge to many. Hence special attention may be paid to these aspects.

E. Transitioning from being a day scholar to a hosteller:

- Hostel life can be quite different and challenging for those who have never lived away from homes before. But this is certainly a challenge that can be readily overcome, with some reorientation of the mind.

- There are **many pluses to hostel life**: facilities are more in hostels. Life on campus gives many opportunities to make **friends** from various backgrounds and cultures. Also 24x7 **access to labs** and internet, etc can be used to do higher quality work.

- One may be grateful for the fact that the **quality of life** is better on campus, than perhaps anywhere else in Chennai.

- It is essential to look at the **transition to hostel** life very **positively**.

- Hostel mates can be a **valuable source of information** about campus resources, and perhaps life in general!

- Entertainment and **occasional high-quality breaks** from research is made really possible through good **peer group** found in hostels.

F. Dealing with boredom and failures

- It helps to be **realistic** about life and work. Failures are inevitable. A **research mind set** usually looks at **failure as an opportunity** to learn more and better!
- Motivating yourself involves many aspects including taking **complete ownership** of the **problem**. Oftentimes it is noticed that discussing with the advisor, and coming up with a problem that is **exciting for you**, can avert boredom and enhance confidence.
- Maintain a **healthy balance** between **difficulty level** of the problem you choose, and the **skill level** you have. Hence challenge yourself suitably, and viably. Too much challenge can drain you; too little can bore you; just enough challenge can motivate you!
- Be **watchful of your own mood** (and those of others). If there is consistently low mood, that is affecting your behavior and work, please use the **campus counseling support** network. It is essential to use **campus resources** to ensure your **well being**.

G. Goals and Research:

- Having both **long and short term** goals (that are generally consistent with one another and oriented towards each other) helps.
- Small, bite sized goals that enable a **sense of progress**, and also allow easy self-evaluation is generally recommended.
- It is better to **not compare one self with others**; instead appreciating the varied nature of the research enterprise and the multitude of ways in which people approach it is better. **Research is a highly differentiated** space after all!

Additional concerns and feedback students shared, which could not be discussed at length:

- How may one work towards **well rounded development** during a PhD (especially given the highly specialized nature of training)?
  Plausible answer: deliberate involvement in activities that support **human development** (intellectual and emotional) is likely to **enable preparation for life**. Also developing

crucial academic skills including **analytic thinking**, **academic writing**, professional **communication** etc. are essential.

** The general observation is that many students face several challenges in developing **critical thinking** and **academic writing**. English grammar is also a specific challenge to many. Hence special attention may be paid to these aspects.

- What are the timelines for achieving various milestones during MS/PhD?

  Plausible answer: using advisor (s) for sound boarding, ensuring quick foray into relevant literature, and careful and timely development of a well posed problem is generally suggested. Taking onus and structuring one's PhD, develop a Gantt chart for yourself (perhaps even before your research proposal seminar) may enable better time management, and introduce greater predictability in your pathway to PhD. However in all cases, developing a tolerance for ambiguity and being open to possibilities is essential.

  ** Typical milestones you may plan for:
    1. completion of comprehensive exam (only for PhD scholars) – between 2nd and 3rd semester
    2. research proposal seminar – by end of 2nd year
    3. 1st progress seminar – by 3rd year end (latest)
    4. submission of thesis – ideally between 4th to 5th year. However you may expect some delays (very normal in any PhD program; hence please plan to complete work packages and writing that are in your control, accordingly – this will help you gain necessary time buffers).

- What are the complaint redressal mechanisms at IITM (for interpersonal conflicts etc.) that might arise? What is the mechanism for conflicts in lab space?

  One response: Mitr is a good agency to get a first level advise, on personal and other matters. You may take people who can a make a difference in your case into confidence thereafter, and see how your specific issue may be addressed (at either group, department or institute level)

Also important issues (especially to do with your academics and research work) should be brought to notice of HoD.

- How does one go about reporting injustice (based on personal identities students may have) or ethical concerns?
  An indicative response: Ethical concerns in your lab and research may be immediately reported to your faculty advisor. Likewise, injustice needs to be addressed through timely alert to the concerned authority. Students at IITM are encouraged to be well rounded citizens, and participate in the creation of a just and equitable society (here and wherever they are).

- How can one work towards improving the quality of life and study environment in IITM? For example: how can one ensure amenities such as personal laptop, bookshelves etc. are provided?
  prospective answer: perhaps collectively written letters addressed to HoD etc can help in the IIT system.

- How can one ensure sufficient national and international exposure during PhD?
  answer: IITM through the IAR office liberally funds attendance in conferences. The norms keep changing, but look out for opportunities! There are also opportunities for scholars, who are at various stages of their research work. Emails containing information on opportunities are frequently sent out by IAR or DoST offices.

  Also apart from Dean (IAR), the institute officially supports travel for 1 national and 1 international conference per year for every student.

- What are the avenues in IITM for skills training (on equipment, Latex etc)?
  answer: IITM is a dynamic campus, with a wide range of training activities of academic and non-academic nature happening routinely. In partnership with your advisor, friends and/or department, there is almost nothing that you cannot get. And yes, always look for online options (eg. NPTEL, Coursera, tutorials on specific methods/softwares etc.) for a specific training opportunity for which a 'physical' workshop may not be immediately

available. Also looking out for workshops in all the neighboring campuses, widens your opportunities.

- How does one overcome the fear of isolation and alienation; especially given that there is a perception that PhD is a solitary journey?

  prospective answer: please read C, E, F

- What are the institutional support mechanisms for stress management?

  prospective answer: please read F (last part)

- What are the issues specific to part-time and external registrants PhD students that one may need to know?

  Work in progress – we need more student and faculty inputs on this

Note: In case you notice any errors, or wish to suggest some additional content in this document, please email tijuthomas@iitm.ac.in We will be happy to hear from you.