Why Crafting Your Career?
One of our mandates is enhancing skill-building within the scientific community in India. As a part of this, we have been engaged in developing and distributing career resources for students and science professionals, using both online and offline means. The Crafting your Career (CYC) workshops and webinar series is one of our recent efforts in this direction. Till now, 7 offline workshops and 6 online webinars have been conducted.

Why this Survey?
Having completed the CYC workshops and webinar series in February 2020; we came up with a survey, whose results are presented in the following document. Through this survey, we wished to understand whether these workshops and webinar series have had an impact on the career choices, overall awareness, and/or professional development of the attendees. We also wanted to understand the specific ways in which we have made an impact and learn what we can do to further improve future editions of these sessions.

About us
IndiaBioscience is an organisation that fills a unique niche in the ecosystem of the life sciences in India, by being a catalyst to promote changes that affect the culture and practice of the field, through engagement with academia, government, and industry at various levels. Our verticals include Networking, Communication, Skill-Building, Data & Policy, and Education.
**Section 1: Respondents of the Survey**

**Method:** The survey was circulated to the CYC workshops and webinar series participants who provided their contact details and agreed to receive further communication via email. We received 182 responses for this survey.

**Breakup of the present career stage of survey respondents**

<table>
<thead>
<tr>
<th>Role</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student (Masters)</td>
<td>35</td>
</tr>
<tr>
<td>Student (PhD)</td>
<td>47</td>
</tr>
<tr>
<td>Student (Bachelors)</td>
<td>72</td>
</tr>
<tr>
<td>Educator</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Science Professional</td>
<td>7</td>
</tr>
<tr>
<td>Young Investigator</td>
<td>4</td>
</tr>
<tr>
<td>Postdoctoral Fellow</td>
<td>1</td>
</tr>
<tr>
<td>Student (JRF/Short term project/Intern)</td>
<td>10</td>
</tr>
</tbody>
</table>

**Gender**

- Female: 54
- Male: 124
- Prefer not to say: 0

**CYC workshop/webinar attended**

- Online CYC session (Webinar): 31
- In-person workshop: 15
- Both: 135

**Pre-CYC Awareness about science careers:** In order to understand the familiarity of CYC participants with various career options and their awareness of career development methods, we asked the following questions.

**Had you attended any other career-related workshops or training sessions before participating in the CYC?**

- Yes: 70.2%
- No: 29.8%

**Had you explored any career-related resources (online/offline) before participating in the CYC?**

- Yes: 47.7%
- No: 52.3%
Section 2: CYC Structure and Career Talks

Speakers and interactivity: For evaluating the choice of speakers and level of interactivity during CYCs, we asked the respondents to rate these two, the responses to which are shown to the right.

We find that almost all attendees were satisfied with the choice of speakers and levels of interactivity during the sessions. There is however scope for improvement in the levels of interactivity.

Post-CYC networking by attendees: In order to find out if attendees actually connected and continued their interaction with speakers, we asked the respondents if they connected to the speakers for mentoring and networking after the session. The responses to this are shown here.

We observed that one-fourth of the respondents connected with the speakers for networking and mentoring post the CYC workshop or webinar series.

Science Professional Talks: In order to evaluate the impression that the career talks left on the attendees during the sessions, we asked the survey respondents the questions listed underneath.

We observe that most of the attendees reported benefitting from listening to the science professional talks during CYC workshops.
Section 3: Impact of CYCs on future careers of participants

**Impact Analysis**: In order to understand specific ways in which attending CYC workshops and webinar series have made an impact on the future careers of attendees, questions were framed under three general themes, whose results are presented below.

### Assessment of mindset change

- My approach towards career development has changed after attending the session
- I am aware of more individuals/mentors who might be able to help me in my career journey
- I am aware of more resources that might help me make an informed career choice
- I feel better equipped to navigate my career path
- I am more aware of the steps to take in order to venture into a career path of my choice

### Assessment of behaviour/activity change

- I am considering a career shift/transition in the near future
- I have tried to build/expand my professional network
- I have tried to apply the skills I learned during the CYC in my professional journey
- I have made a career shift/transition
- I have started exploring one or more new career paths

### Assessment of direct impact

- I formed new professional connections as a result of attending the workshop
- I was able to find a new job as a result of the knowledge I gained during the CYC workshop
- I have transitioned into a new career directly as a result of attending a CYC session
Section 4: Comparative Analysis for Impact of CYCs

Comparative Analysis (career tools): Each CYC workshop and webinar series provided one or more tools required to craft career paths, mentors, etc. We assessed the level of knowledge, expertise, and confidence with respect to the following career development concepts BEFORE and AFTER attending the CYC session. The responses to these are shown below.

We observe a clear shift towards improvement in knowledge, expertise, and confidence for all the career development concepts assessed after attending the CYC session. For example, a greater number of respondents felt their knowledge, expertise, and confidence is 'excellent' after attending CYC workshops and webinar series. Conversely, a consistent reduction in the number of respondents who rated their knowledge, expertise, and confidence as 'poor' is also seen.

Comparative Analysis (primary career choice):
To understand if there was an overall change in primary career choice due to CYC workshops and webinar series, we compared the preferences of the respondents BEFORE and AFTER attending the CYC session. The responses to these are shown here.

Here, we observe the number of participants that opted for non-academic careers increased after attending CYC workshops and webinar series. There is also a large proportion of respondents who are considering both options or haven't decided yet in both scenarios.
Section 5: Testimonials

Testimonials from survey respondents describing ways in which they applied what they learned during CYC workshops and webinar series

I came out of the inferiority that PhD is compulsory to become a science writer!

I understood non-academic streams that are a good fit for me, applied them to my placement session that took place last semester and while applying for 6 months of projects/internship.

I learned that other than academia, science has a much broader range of employment opportunities. Also, I learned that failures will come in our way no matter which field we are in but what makes us different is the way we deal with them.

What drove home for me is the idea that an academic researcher at any stage of their career can reach out to people in the field for exploring and learning. Secondly, I became aware that this networking process is not easy and straightforward. Thirdly, knowing about other career trajectories gave courage and confidence to pursue new ideas that one wants to explore.

I reached out to my teachers, contacts and got a freelance job opportunity related to my field.

I was clueless about the Research Management world. The talk by Dr. Savita Ayyar exposed me to the same and also to DBT/Wellcome Trust India Alliance, which eventually became my workplace.

I used the knowledge shared in one of the sessions about how to dissect a job advertisement and it really changed the way I applied.

I got interested in the idea of pursuing a career in science communication post my PhD. I am improving my skills by managing a social media handle of my PhD network.

Money should not be the only criteria for the selection of a career, one also needs to account for interests and skills. I have selected my next job based on my interest and I have performed well.

Note: Minor editing in testimonials have been done for more clarity.
**Section 6: Conclusion**

**Recommendation to others:** We asked the respondents about the likelihood of their recommending the CYC workshops and webinar series and other career-related resources by IndiaBioscience to others. The results of the responses are shown here.

![Bar chart showing recommendation to others](chart.png)

**Summary**

Respondents to this survey covered a wide spectrum of academic and non-academic career stages with masters’ and PhD students being the maximum in number. A majority of the respondents were females. Nearly three-fourths of respondents had attended a CYC webinar while one third had attended an in-person CYC workshop. The pre-CYC awareness analysis showed that the majority of attendees were exposed to such training sessions for the first time though they were somewhat aware of other career-related resources available online.

With respect to the structure of CYC workshops and webinar series, we saw that the attendees liked the choice of speakers at the sessions and were satisfied with the interactivity levels while there is room for improvement with the latter. Talks by science professionals were a crucial component of CYC workshops and webinar series, increasing the awareness of attendees and providing them with a platform to connect with individuals within various scientific professions. These talks were well received by the attendees who reported gaining more in-depth knowledge, expanding their network, and becoming more aware of the possibilities.

In order to precisely assess the difference CYC workshops and webinar series made, we compared knowledge, expertise, and confidence with respect to important career development shared during the workshops and webinar sessions before and after the session. We found an increase in overall knowledge, expertise, and confidence in all these tools after attending a CYC session.

Importantly, we observed an increased preference on the part of the attendees for considering non-academic science careers as their primary options in the future. The specific ways in which CYC workshops and webinar series made an impact were also assessed. At the behavioral level, we saw that the attendees have actually taken steps to explore various scientific careers. As a direct impact, we also saw that many CYC workshops and webinar series attendees developed professional connections, found a new job, and actually transitioned to a new career. Most respondents also said that they would recommend CYC workshops and webinar series and career-related resources by IndiaBioscience to others.

Finally, individual testimonials and stories on the attendees' reflections show that CYC workshops and webinars series have really impacted lives in meaningful and positive ways.

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- **CYC Module development:** Lakshmi Ganesan, Shreya Ghosh, Smita Jain
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