

# iGEM: LINKING SCIENTIFIC PROGRESS AND SOCIETY



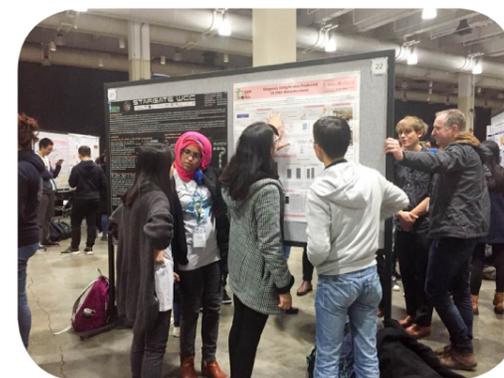
**RAVNEET SARAN**

BSc Student (Major in Biochemistry)

*International Genetically Engineered Machine (iGEM) Competition 2017 - Bronze Medal*

My main motivations for joining the iGEM team of 2017 were to enrich my experiences and gain an invaluable opportunity to work with a diverse set of people towards a collaborative goal. Having worked on an individual research project the previous summer, I took this as a chance to work instead in a team towards a more extensive research objective than possible solely by oneself. I believed that it would give me an opportunity to enhance my laboratory techniques, as well as gain imperative transferrable skills.

The iGEM competition was an international synthetic biology competition, comprising of teams from all over the world. It involved a multi-faceted effort both inside and outside the laboratory to



create impactful projects, building a connection between lab work and the community as a whole. Through this competition, our team strived

to construct a 3-dimensional DNA nanostructure in the lab, be capable of detecting and hence, diagnosing diseases. We further attempted to raise public awareness of synthetic biology, particularly DNA nanotechnology, as well as mentor the next generation of Science students by holding high school workshops. Additionally, we organised a Biosafety conference in hopes of equipping all Hong Kong and Shenzhen iGEM teams with the biosafety techniques necessary in synthetic biology.



While each aspect of the competition was challenging in its own way, the one which presented me with the most difficulty was unsurprisingly the laboratory component. I was able to learn through the many bumps and rides the importance of precision in experiments and the various problem-solving strategies that we could employ when experiments did not follow the expected

course. While this was one of the most painstaking processes in the project, putting our heads together for months on end to push the experiments forward was also one of the most personally memorable. Through this, I was really able to understand the importance of perseverance and teamwork, without which I did not think the completion of any project would be possible.

Another highly unforgettable experience for me was the Giant Jamboree, which took place in Boston, Massachusetts in the United States. This was the final stage of the competition and comprised of project presentations by all worldwide teams. The opportunity to present our project in front of an esteemed panel of judges was indispensable in the improvement of my presentation skills. I was also able to gain new perspectives from the presentations of the other competitors and open my eyes to a more positive impact-focused and goal-oriented way of thinking about scientific research. This allowed me to connect the work we had done in Hong Kong with the rest of the world and gain a deeper understanding of the big picture of scientific progress.



Overall, I learnt a tremendous amount from working on the iGEM competition, both in terms of laboratory work, logistics and event management. This experience has assisted in broadening my horizons and helping to further my passion in the sciences and in making a positive societal contribution through scientific progress.

“*Teamwork and perseverance are the foundations of impact-driven scientific progress.*”